Health and Social Service Manpower In Alberta, 1985

Alberta

HEALTH AND SOCIAL SERVICES
DISCIPLINES COMMITTEE

87-02071/

HEALTH AND SOCIAL SERVICE MANPOWER IN ALBERTA, 1985

Alberta Health & Social Services Disciplines Committee
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FOREWORD

The Alberta Health and Social Services Disciplines Committee is an interdepartmental advisory committee representing the Departments of Advanced Education, Career Development and Employment, Community and Occupational Health, Hospitals and Medical Care, and Social Services. The main role of the Committee is to advise the Alberta Government on major human services manpower, training, and related issues. In addition, the Committee regularly collects information and data to support its manpower monitoring and planning work.

The Committee has always recognized the importance of promoting the awareness of human services manpower issues. To this end, the Committee makes available its manpower information and data to health care and social service organizations, post-secondary educational institutions, other government agencies, and the general public through a series of publications. Each year since 1978, a manpower reference document has been produced by the Committee. This year's publication, **Health and Social Service Manpower in Alberta, 1985**, presents a variety of information and statistics on 36 human services occupations in the province. The Committee is confident that the public will find it a useful reference manual.

On behalf of the Alberta Health and Social Services Disciplines Committee, I wish to thank the many professional associations, licensing boards, educational institutions and employing agencies which have generously provided valuable data by participating in a number of surveys conducted by the Committee. Without their support and cooperation, the publication of **Health and Social Service Manpower in Alberta, 1985** would not have been possible.

Elvin A. Christenson, F.C.A.
Chairman, Alberta Health and Social
Services Disciplines Committee

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INTRODUCTION

This is the eighth annual publication on health and social service manpower in Alberta. The Alberta Health and Social Services Disciplines Committee publishes this report with a view to making available to the public manpower information the Committee has collected from a variety of sources. The report contains information and statistical data on thirty-six health and social service occupations, including: functional definitions, information concerning professional associations, licensing bodies, and legislation, number of practitioners by location, historical and comparative manpower data, number of students in and graduates from health and social service training programs in Alberta, and information about continuing education programs.

SCOPE OF COVERAGE

The following thirty-six health and social service occupations are included in this report:

> audiologists/speech pathologists, biomedical engineers, child care workers, chiropractors, combined laboratory and x-ray technicians, dental assistants, dental hygienists, dental technicians, dentists, denturists, dietary technicians, dietitians/nutritionists, emergency medical technicians, health records administrators, health records technicians, medical laboratory technologists, medical radiation technologists, occupational hygiene technologists, occupational therapists, ophthalmic dispensers, optometrists, pharmacists, pharmacy assistants, physicians, physical therapists, podiatrists, prosthetists and orthotists, psychiatric nurses, psychologists, public health inspectors, recreational therapists, registered nurses, registered nursing assistants, rehabilitation practitioners, respiratory therapists, social workers.

The health care and social service sector contains scores of occupations. Given the limitation of time and other resources, it is not possible for this publication to report on all occupations. Two criteria have been used to decide which occupation is to be included: legislative recognition and the existence of training programs. Only those occupations with licensing legislation and/or formal training programs in Alberta (or inter-provincial training agreements) are included.

The 1985 edition of **Health & Social Service Manpower in Alberta** contains a number of departures from previous editions. First, a new chapter on occupational hygiene technologists has been added. Because of the introduction of an occupational hygiene diploma program in 1984-85 at Mount Royal College, occupational hygiene technologists now meet the criteria for inclusion in this publication. Second, as a result of decisions made by the Health Disciplines Board, medical radiological personnel are now known as "medical radiation technologists." Accordingly, the old title of "radiological technician," used in previous editions of this publication, has been replaced by the new title of "medical radiation technologist." Third, in order to provide more detailed information on the geographic distribution of personnel in the province, Table 1B has been added to a number of chapters on occupational groups with a substantial number of personnel.

Information on the geographic distribution of personnel in this report is based on census divisions, with separate statistical data for the Census Metropolitan Areas of Calgary and Edmonton. Manpower information for the Census Metropolitan Areas of Calgary and Edmonton is presented separately from their respective census divisions in order to provide a clearer picture of the urban and non-urban distribution of personnel within these census divisions.[1] A census division map is shown on Page 11.

The 1985 manpower data appearing in this publication are as of December 31, 1985, except where noted.

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[1] The Census Metropolitan Area of Edmonton includes the cities of Edmonton, Fort Saskatchewan and St. Albert, the towns of Bon Accord, Gibbons, Morinville, and Redwater, the village of Legal, the municipal district of Sturgeon #90, and the county of Strathcona #20. The Census Metropolitan Area of Calgary is the City of Calgary.

INFORMATION SOURCES

The principal sources of information and data contained in this publication are:

1. The 1980 edition of the **Canadian Classification and Dictionary of Occupations**;
2. Current occupational licensing legislation;
3. Provincial professional associations or licensing bodies for 34 health and social service occupational groups (two groups have no professional associations or licensing bodies);
4. Surveys of employers of health and social service personnel conducted by the Alberta Health and Social Services Disciplines Committee;
5. Survey of health and social service training programs in Alberta conducted by Alberta Advanced Education;
6. Reports published and information provided by Health and Welfare Canada and other Western provinces; and
7. Population estimates and projections provided by the Alberta Bureau of Statistics, and municipal census data provided by Alberta Municipal Affairs.

The **Canadian Classification and Dictionary of Occupations** is the source of many of the functional definitions appearing in this publication. In a few instances definitions were obtained from occupational licensing legislation or other sources. Information on legislation was obtained from current Acts governing these occupational groups.

Most of the manpower data and information on continuing education appearing in the report were obtained from professional associations and licensing bodies, particularly in cases where registration with a professional association or licensing body was mandatory. A survey of professional associations and licensing bodies was conducted by the Alberta Health and Social Services Disciplines Committee in December 1985. But for those occupational groups without mandatory registration requirements, the number of personnel registered often represents only a fraction of the actual number of personnel. For these groups, the surveys of employers of health and social service personnel were used as an alternative source of data. These surveys were conducted by the Alberta Health and Social Services Disciplines Committee.

Alberta Advanced Education conducted a survey of human services training programs in provincial post-secondary educational institutions. The survey was designed to obtain, among other things, data on enrolment and the number of graduates. The results of the survey were published in **Alberta Health and Social Service Training Program Inventory 1984-85** which is the source of information on basic education programs contained in this publication.

In order to put Alberta's manpower situation in the national and regional contexts, provincial personnel-to-population ratios are compared to those for Canada and for Western Canada where information from other jurisdictions is available. Health and Welfare Canada and provincial health departments of British Columbia, Manitoba, and Saskatchewan are the sources of information.

DATA LIMITATIONS

Manpower data from professional associations, surveys of employers, and other sources have a number of inadequacies:

1. Some professional association registries included members who were not residents of Alberta. In most instances, out-of-province members were excluded for the purpose of this publication, but this was not always possible.

2. The number of practitioners is generally underestimated for those occupational groups where registration is not required in order to

practice. For those groups where there are no mandatory registration requirements, the surveys of employers of health and social service personnel were used as an alternative source of data. Generally speaking, registration data from professional associations or registration bodies, for groups requiring mandatory registration, provide manpower information about the potential number of personnel in the province. Manpower statistics from the surveys of employers, on the other hand, reflect the number of personnel practicing at the time of the surveys.

3. Table 2 in many of the following chapters gives personnel-to-population ratios for Alberta, Western Canada, and Canada. The purpose is to provide comparisons with respect to current manpower status. It should be noted, however, that some comparisons may not be appropriate because manpower data from different jurisdictions are obtained from dissimilar sources and are based on incompatible assumptions.

MANPOWER SITUATION IN 1985

In 1979 the Alberta Health and Social Services Disciplines Committee began conducting manpower surveys of employers of health and social service personnel in Alberta. Twelve surveys have been conducted since 1979, two in each year from 1979 to 1983, and one in each year since 1983. The Committee's twelfth employer survey was conducted on March 31, 1985. Data were collected on 81 occupational groups from over 4,300 employing agencies, with a response rate of 98.6 percent.

As of March 31, 1985, there were over 55,000 "full-time equivalent" established positions[2] for health and social service personnel in the employing agencies surveyed. At the time of the survey, there were almost 2,000 vacant "full-time equivalent" positions, representing an average vacancy rate of 2.9 percent. There were over 7,300 resignations during the period from

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[2] This number does not necessarily reflect the number of persons actually employed. Two or more part-time personnel often fill one full-time position. In addition, the number of "full-time equivalent" positions also includes vacancies.

April 1, 1984 to March 31, 1985, representing an average turnover rate of 10.6 percent during the 12-month period prior to the survey.

As of March 31, 1985, the occupational groups experiencing the highest vacancy rates were:

- Ultrasound Technicians (14.3%);
- Occupational Therapists (12.3);
- Community Youth Workers (12.3%);
- Dental Hygienists (12.0%);
- Nuclear Medicine Technologists (9.0%);
- Respiratory Therapists/Technologists (7.6%);
- Community/Public Health Nurses (7.4%);
- Physical Therapists (7.4%);
- Social Workers with MSW Degrees (7.3%); and
- Child Care Workers with Diploma in Child Care/Youth Development (7.2%)

The manpower groups with the highest 12-month turnover rates:

- Social Service Aides (26.2%);
- Child Care Workers with Diploma in Child Care/Youth Development (25.9%);
- Life Skills Coaches (23.4%);
- Community Youth Workers (20.0%);
- Respiratory Therapists/Technologists (19.2%);
- Physical Therapists (19.1%);
- Rehabilitation Counsellors/Practitioners (18.7%).
- Optometric Assistants (18.6%);
- Occupational Therapists (18.5%); and
- Homehelpers (18.5%).

TRAINING OF HEALTH AND SOCIAL SERVICE PERSONNEL

In 1984-85 Alberta had a total of 117 educational programs to prepare health and social service personnel. These training programs were found in 27 post-secondary educational institutions, hospitals, and cancer treatment centers in the province. In a few areas where there were no educational programs in the province, Alberta had interprovincial training agreements in order to allow Albertans to obtain training in other provinces.

Alberta Advanced Education annually publishes, on behalf of the Alberta Health and Social Services Disciplines Committee, a report entitled **Alberta Health and Social Service Training Program Inventory**. The 1984-85 edition of this publication contains the following information on health and social service training programs in Alberta:

- Location and length of training programs;
- Number of applicants;
- First-year enrolment quota;
- Actual enrolment; and
- Number of graduates.

Readers who wish to obtain more information on training programs should consult this publication.

FORMAT OF THE PUBLICATION

The format of this publication closely follows the format of previous publications. Following this introduction, there are separate chapters on each of the 36 occupational groups. Each chapter is divided into four sections:

1. An overview section which includes a functional definition and statistical highlights of the occupational group;

2. A section on professional association, licensing authority, and regulatory legislation;

3. A section on personnel data including number of personnel, geographic distribution of personnel, and historical and comparative manpower data; and

4. A section on educational programs including both basic and continuing education programs.

There is a breakdown by speciality area for the following occupational groups: dentists, physicians, and registered nurses.

The table on page nine provides summary information for the 36 occupational groups.

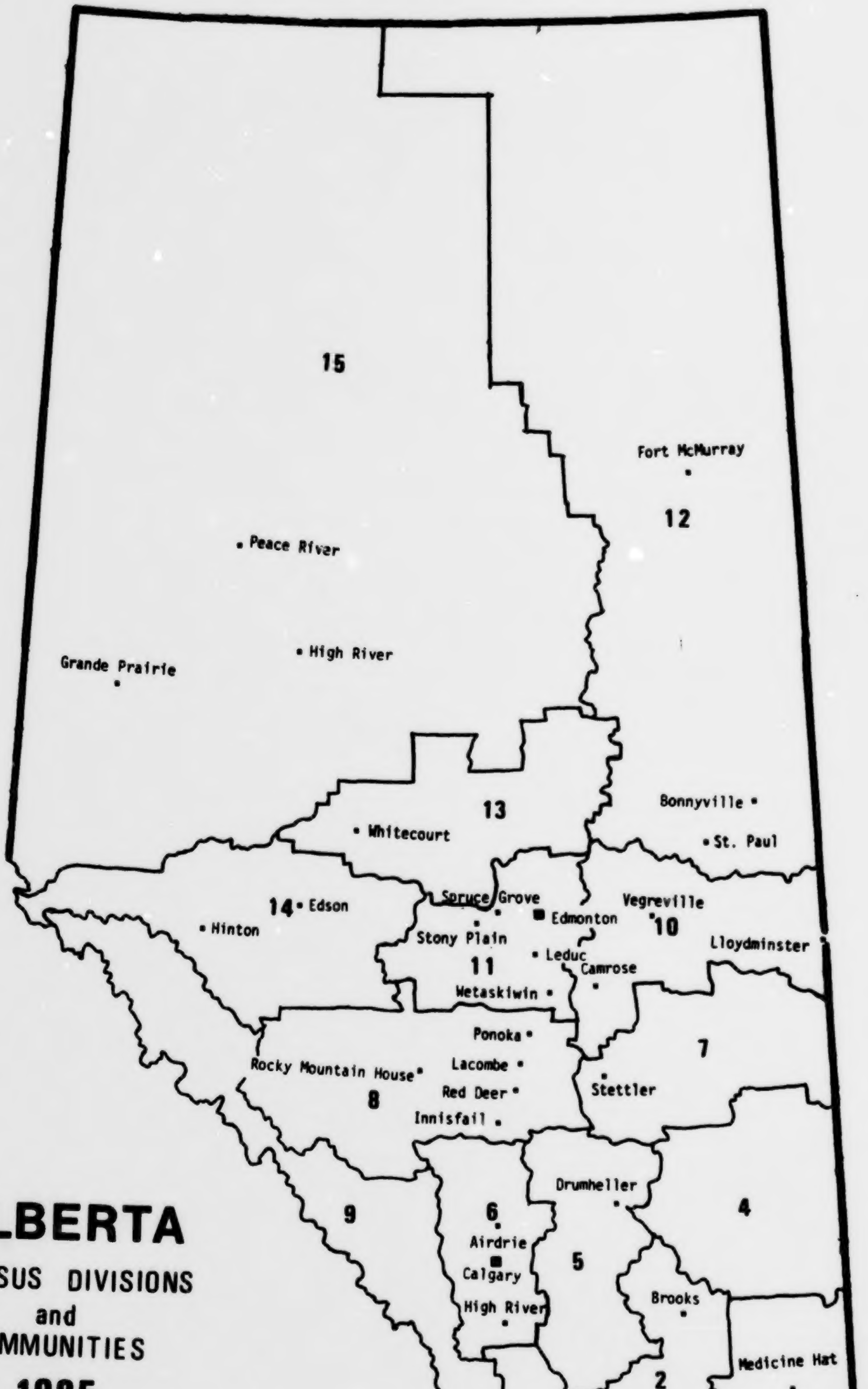
The map of Alberta on page 11, differs slightly from previous editions. In addition to census divisions, communities are now also included.

SUMMARY INFORMATION

	Number of Registered/ Practicing Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Audiologists and Speech Pathologists	325	1: 7,298		1	24
Biomedical Engineers	19	1:124,842		3	2
Child Care Workers	1,358	1: 1,747		3	39
Chiropractors	297	1: 7,987	X	-	-
Combined Laboratory and X-Ray Technicians	349	1: 6,797		1	26
Dental Assistants	1,838	1: 1,291	X	3	181
Dental Hygienists	598	1: 3,967	X	1	35
Dental Technicians	145	1: 16,359	X	1	12
Dentists	1,186	1: 2,000	X	1	44
Denturists	132	1: 17,970	X	1	13
Dietary Technicians	248	1: 9,565		2	40
Dietitians/ Nutritionists	366	1: 6,481	X	2	24
Emergency Medical Technicians	994	1: 2,386	X	2	219
Health Record Administrators	142	1: 16,704		1	10
Health Record Technicians	303	1: 7,828		1	11
Medical Laboratory Technologists	2,135	1: 1,111		3	109
Medical Radiation Technologists	926	1: 2,562	X	4	70
Occupational Hygiene Technologists	88	1: 26,995		1	-
Occupational Therapists	296	1: 8,014		1	39
Ophthalmic Dispensers	321	1: 7,389	X	-	-
Optometrists	210	1: 11,295	X	-	-
Pharmacists	1,881	1: 1,261	X	1	60
Pharmacy Assistants	319	1: 7,436		1	33
Physical Therapists	942	1: 2,518	X	2	45
Physicians	3,773	1: 629	X	2	183
Podiatrists	18	1:131,778	X	-	-
Prosthetists and Orthotists	38	1: 62,421		-	-
Psychiatric Nurses	645	1: 3,678	X	2	56
Psychologists	1,329	1: 1,785	X	10	78
Public Health Inspectors	131	1: 18,107	X	-	-

SUMMARY INFORMATION (Continued)

	Number of Registered/ Practicing Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Recreational Therapists	206	1: 11,515		1	9
Registered Nurses	20,843	1: 114	X	24	1,041
Registered Nursing Assistants	7,643	1: 310	X	3	324
Rehabilitation Practitioners	1,212	1: 1,957	X	5	151
Respiratory Therapists	269	1: 8,818	X	2	53
Social Workers	2,290	1: 1,036	X	5	307



ALBERTA

CENSUS DIVISIONS
and
COMMUNITIES
1985

15
Fort McMurray
12
Peace River
High River
Grande Prairie
13
Bonnyville
Whitecourt
St. Paul
14
Edson
Hinton
Spruce Grove
Edmonton
Vegreville
10
Stony Plain
Lloydminster
11
Leduc
Camrose
Wetaskiwin
Ponoka
7
Rocky Mountain House
Lacombe
8
Red Deer
Stettler
Innisfail
Drumheller
9
6
4
Airdrie
5
Calgary
Brooks
High River
Medicine Hat
2
1
Lethbridge
Crowsnest Pass
3

AUDIOLOGISTS AND SPEECH PATHOLOGISTS

I. OVERVIEW

Definition: Audiologists

Provide diagnostic evaluation and rehabilitative services and conduct research related to hearing. Administer air and bone conduction and other audiometric tests and examinations to determine hearing efficiency. Coordinate audiometric results with medical, social, behavioural and other diagnostic data. Evaluate total response pattern and acoustic tests to differentiate between organic and non-organic hearing loss. Plan, direct and participate in counselling, speech-reading and other rehabilitation programs. Act as consultants to educational, medical and other professional groups. Conduct research in physiology, pathology, biophysics and psychophysics of auditory system, if required. Design and develop clinical and research procedures and apparatus, if required.

Speech Pathologists

Diagnose and treat speech, language and voice disorders and perform related research. Administer tests and observe patient to diagnose nature of disorder and to evaluate degree of impairment. Plan and conduct remedial exercises and programs to correct stuttering, abnormal articulation and other disorders. Provide speech training for patient with communication problems caused by cerebral palsy, surgical removal of larynx, hearing deficiencies or other impairments. Plan individual or group therapy in rehabilitation of communication disorders. Counsel and guide language-handicapped individuals and their families, teachers or employers. Act as consultants to educational, medical, dental and other professional groups. Conduct research related to development of diagnostic and treatment techniques and procedures or design of apparatus.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 288 audiologists and speech pathologists registered with the Speech and Hearing Association of Alberta (S.H.A.A.) in 1985[1], but registration is not compulsory for audiologists and speech pathologists. According to a survey of health and social service personnel working in Alberta, which was conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, there were 29 audiologists and 296 speech pathologists practicing in the province.[2] As the March 31, 1984 survey was not a comprehensive survey, its data on speech and hearing personnel cannot be used for comparison purposes. The last comprehensive survey was conducted in 1983[3] which showed that there were 24 audiologists and 306 speech pathologists practicing in Alberta as of September 30, 1983.

Approximately 73 percent of the speech and hearing personnel practiced in the Census Metropolitan Areas of Calgary and Edmonton. The provincial audiologist-to-population ratio was 1:81,793, and the provincial speech pathologist-to-population ratio was 1:8,014 in 1985.

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[1] Source: Speech and Hearing Association of Alberta. Number of speech and hearing personnel registered with the S.H.A.A. as of October 31, 1985.

[2] "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Speech and Hearing Association of Alberta
Box 86, Main Post Office
Edmonton, Alberta
T5J 2G9

President: Ms. Theresa Belter

c) Legislation:

There is no legislation regulating audiologists and speech pathologists in Alberta at present.

III. PERSONNEL DATA

TABLE 1A NUMBER OF AUDIOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	58,400	-
2 (Lethbridge)	1	118,900	1:118,900
3 (Pincher Creek)	0	38,800	-
4 (Hanna)	0	12,900	-
5 (Drumheller)	1	41,300	1: 41,300
6 (Calgary)[3]	0	71,457	-
7 (Stettler)	0	42,900	-
8 (Red Deer)	0	136,100	-
9 (Banff)	0	23,700	-
10 (Camrose)	0	82,300	-
11 (Edmonton)[4]	0	119,884	-
12 (Fort McMurray)	0	93,900	-
13 (Whitecourt)	0	56,900	-
14 (Hinton)	0	27,200	-
15 (Grande Prairie)	1	139,200	1:139,200
Census Metropolitan Area of Calgary	12	625,143[5]	1: 52,095
Census Metropolitan Area of Edmonton	14	683,016[5]	1: 48,787
PROVINCIAL TOTAL	29	2,372,000	1: 81,793

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF SPEECH PATHOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	58,400	1: 9,733
2 (Lethbridge)	17	118,900	1: 6,994
3 (Pincher Creek)	2	38,800	1:19,400
4 (Hanna)	1	12,900	1:12,900
5 (Drumheller)	2	41,300	1:20,650
6 (Calgary)[3]	3	71,457	1:23,819
7 (Stettler)	3	42,900	1:14,300
8 (Red Deer)	8	136,100	1:17,013
9 (Banff)	1	23,700	1:23,700
10 (Camrose)	7	82,300	1:11,757
11 (Edmonton)[4]	16	119,884	1: 7,493
12 (Fort McMurray)	6	93,900	1:15,650
13 (Whitecourt)	2	56,900	1:28,450
14 (Hinton)	3	27,200	1: 9,067
15 (Grande Prairie)	9	139,200	1:15,467
Census Metropolitan Area of Calgary	96	625,143[5]	1: 6,512
Census Metropolitan Area of Edmonton	114	683,016[5]	1: 5,991
PROVINCIAL TOTAL	296	2,372,000	1: 8,014

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	330[1]	184[2]	325[3]
% Change in Number of Practicing Personnel	15.8%	N/A	N/A
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratio:			
- Alberta	1: 7,141	1:12,839	1: 7,298
- Western Canada[6]	1: 9,616	-	-
- Canada[7]	1:13,878	-	-

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[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The discrepancy between the 1983 and 1984 figures mainly is due to the fact that the 1984 survey is not a comprehensive survey, and not all audiologists and speech pathologists in the province were counted in 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Sources: (i) **Rollcall 83**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee. The British Columbia figure refers to personnel who were registered (registration is not compulsory) and practicing. The Alberta figure refers to practicing personnel. The Manitoba and Saskatchewan figures refer to personnel registered with their respective provincial professional associations.

[7] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year baccalaureate degree program in speech pathology and audiology, including a pre-professional year. The program produced 24 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	Pre-Professional Yr	Pre-Professional Yr	Pre-Professional Yr
2nd Year	30	32	34
3rd Year	25	27	28
4th Year	23	20	24
Graduates:	22	19	24

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

In addition to its annual three-day convention, the Continuing Education Committee of the Speech and Hearing Association of Alberta also held a two-day workshop and four single-evening seminars. A couple of two-day workshops were offered by the Glenrose Rehabilitation Hospital and a one-day workshop was offered by Alberta Social Services and Community Health as part of its continuing education program for speech and hearing personnel.

BIOMEDICAL ENGINEERS

I. OVERVIEW

Definition: "Biomedical Engineering - usually either graduate engineers, mostly in electrical engineering with graduate training and experience in the biomedical sciences; or graduate engineers working in the field of Biomedical Engineering. Can play the following roles: provide engineering supervision of the technical staff, manage educational programs for others in the staff, efficient use of equipment, provide engineering consultation, improvement or innovative design of equipment, conduct research."[1]

(Source: **Development in Biomedical Engineering in Canada - Manpower and Governmental Activities**. Ottawa, Ontario: Health Manpower Directorate, Department of National Health and Welfare, 1973; pp. 2-3)

There were 19 biomedical engineers who were residing in Alberta and registered with the Canadian Medical and Biological Engineering Society in 1985.[2] About 90 percent of the biomedical engineers were located in the Census Metropolitan Areas of Calgary and Edmonton. The provincial biomedical engineer-to-population ratio was 1:124,842 in 1985.

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[1] The term, "biomedical engineer," is often used much more loosely to cover physicists, computing scientists, and other specialists and technicians, working in the biomedical field, many of whom are not qualified as engineers. In this chapter, this broader interpretation is used.

[2] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Canadian Medical and Biological Engineering Society
c/o National Research Council
Building M-50, Room 164
Ottawa, Ontario
K1A 0R8

National Executive Secretary: Mr. Nelson D. Durie

c) Legislation:

There is no legislation regulating biomedical engineers in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF BIOMEDICAL ENGINEERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	58,400	-
2 (Lethbridge)	0	118,900	-
3 (Pincher Creek)	0	38,800	-
4 (Hanna)	0	12,900	-
5 (Drumheller)	0	41,300	-
6 (Calgary)[3]	0	71,457	-
7 (Stettler)	0	42,900	-
8 (Red Deer)	0	136,100	-
9 (Banff)	0	23,700	-
10 (Camrose)	0	82,300	-
11 (Edmonton)[4]	0	119,884	-
12 (Fort McMurray)	1	93,900	1: 93,900
13 (Whitecourt)	0	56,900	-
14 (Hinton)	0	27,200	-
15 (Grande Prairie)	1	139,200	1:139,200
Census Metropolitan Area of Calgary	4	625,143[5]	1:156,286
Census Metropolitan Area of Edmonton	13	683,016[5]	1: 52,540
PROVINCIAL TOTAL	19	2,372,000	1:124,842

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[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1985.

[2] Source: "Alberta Census Division Population Projections Update 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR BIOMEDICAL ENGINEERS IN ALBERTA, 1983, 1984, and 1985

	1983	1984	1985
Number of Registered Personnel[1]	28	23	19
% Change in Number of Registered Personnel	12.0%	-17.8%	-17.4%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 84,161	1:102,713	1:124,842
- Canada[4]	1: 76,520	-	-

[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1985.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Department of Applied Sciences in Medicine at the University of Alberta offers graduate programs for physicists, engineers, computing scientists and other specialists. Masters and doctoral degree programs are available to students registered in the Department of Applied Sciences in Medicine and to students registered in engineering or science faculties and carrying out their research in the Faculty of Medicine. In 1984-85, there was one graduate from the masters program and one from the doctoral program.

TABLE 3

BASIC EDUCATION PROGRAMS FOR BIOMEDICAL ENGINEERS IN ALBERTA[1]

	1982-83	1983-84	1984-85
A. MASTERS PROGRAMS			
University of Alberta			
Masters of Science offered by the Faculties of Engineering and Science (Program Length: variable)			
Enrolments:	8	2	2
Graduates:	3	1	1
University of Alberta			
Masters of Science offered by the Department of Applied Sciences in Medicine (Program Length: variable)			
Enrolments:	2	4	4
Graduates:	0	1	0
PROVINCIAL TOTAL			
Number of M.Sc. Programs: 2			
Graduates	3	2	1
B. Ph.D. PROGRAM			
University of Alberta (Program Length: variable)			
Enrolments:	0	0	3
Graduates:	0	0	1

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[1] Source: Department of Applied Sciences in Medicine and Department of Biomedical Engineering, Faculty of Electrical Engineering, University of Alberta.

b) Continuing Education Programs:

The Canadian Medical and Biological Engineering Society has developed certification programs for clinical engineers and biomedical engineering technicians and technologists. The Association holds annual conferences and occasionally sponsors continuing education courses.

A number of certification programs are offered to clinical engineers and biomedical engineering technicians and technologists by the Canadian Medical and Biological Engineering Society. The Association also sponsored continuing education programs in conjunction with its annual conference.

CHILD CARE WORKERS

I. OVERVIEW

Definition: Care for and counsel emotionally disturbed or mentally handicapped children and youths in residential treatment facility, in special school or social intervention program. Supervise daily activities and attend to needs of children and youth under care. Arrange and direct recreational activities. Counsel children and youths to help them deal with personal or behavioural problems. Enforce residential rules and take measures to control unruly behaviour. Assess and report problems and progress of children and youths. Confer with other staff members and refer difficult cases to health care professionals or social workers. Help to mediate between child and parents, if required. Provide individual guidance for youths in social intervention programs within community or assist in supervision of special school classes for emotionally disturbed children, if required. Prepare meals, clean and perform related housekeeping duties, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Child Care Workers' Association of Alberta is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Socal Services Disciplines Committee, is used as an alternative source of manpower information.

There were 1,358 child care workers practicing in Alberta in 1985.[1] Approximately 71 percent of the child care workers were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial child care worker-to-population ratio was 1:1,747 in 1985. As child care workers primarily work with children and adolescents, the provincial child care worker-to-population (5-17 years) ratio was 1:343 in 1985.[2]

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Child Care Workers' Association of Alberta
Box 11360
Edmonton, Alberta
T5J 3K6

President: Mr. Jack Phelan

c) Legislation:

There is no legislation regulating child care workers in Alberta at present.

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[2] Source: **Population Projections, Alberta 1984-2011.** Edmonton, Alberta: Alberta Bureau of Statistics, 1984.

III. PERSONNEL DATA

TABLE 1A NUMBER OF CHILD CARE WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	22	58,400	1: 2,655
2 (Lethbridge)	51	118,900	1: 2,331
3 (Pincher Creek)	19	38,800	1: 2,042
4 (Hanna)	1	12,900	1:12,900
5 (Drumheller)	43	41,300	1: 961
6 (Calgary)[3]	12	71,457	1: 5,955
7 (Stettler)	8	42,900	1: 5,363
8 (Red Deer)	49	136,100	1: 2,778
9 (Banff)	5	23,700	1: 4,740
10 (Camrose)	16	82,300	1: 5,144
11 (Edmonton)[4]	16	119,884	1: 7,493
12 (Fort McMurray)	75	93,900	1: 1,252
13 (Whitecourt)	2	56,900	1:28,450
14 (Hinton)	1	27,200	1:27,200
15 (Grande Prairie)	72	139,200	1: 1,933
Census Metropolitan Area of Calgary	480	625,143	1: 1,302
Census Metropolitan Area of Edmonton	486	683,016	1: 1,405
PROVINCIAL TOTAL	1,358	2,372,000	1: 1,747

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF CHILD CARE WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community By Population Size	Number Practicing[1]	Population[2]	Personnel -to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	480	625,143	1: 1,302
Census Metropolitan Area of Edmonton	486	683,016	1: 1,405
Between 10,000 and 60,000			
Airdrie	0	10,431	-
Camrose	16	12,751	1: 786
Fort McMurray	53	36,810	1: 695
Grande Prairie	32	25,056	1: 783
Leduc	1	12,926	1: 12,926
Lethbridge	43	59,901	1: 1,393
Lloydminster	0	10,557	-
Medicine Hat	22	41,717	1: 1,896
Red Deer	26	52,620	1: 2,024
Spruce Grove	0	11,569	-
Wetaskiwin	15	10,022	1: 668
Between 5,000 and 10,000			
Bonnyville	0	5,223	-
Brooks	0	9,421	-
Crownest Pass	0	7,577	-
Drumheller	0	6,671	-
Edson	0	7,110	-
High River	8	5,114	1: 639
Hinton	0	8,904	-
Innisfail	7	5,435	1: 776
Lacombe	6	5,954	992
Peace River	1	6,043	1: 6,043
Ponoka	0	5,221	-
Rocky Mountain House	5	5,126	1: 1,025
St. Paul	6	5,052	1: 842
Stettler	0	5,136	-
Stony Plain	0	5,291	-
Taber	0	6,384	-
Vegreville	0	5,251	-
Whitecourt	0	5,408	-
Under 5,000	151	669,160	1: 4,432
TOTAL	1,358	2,372,000	1: 1,747

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR CHILD CARE WORKERS IN ALBERTA, 1983, 1984 AND 1985

	1983	1984	1985
Number of Practicing Personnel	1,124[1]	1,318[2]	1,358[3]
% Change in Number of Practising Personnel	0.9%	N/A	3.0%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratio: - Alberta	1:2,097	1:1,792	1:1,747

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: As of 1984, community youth workers are included as well.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both Grant McEwan Community College and Mount Royal College offer a two-year child care worker diploma program. This program was previously known as Youth Development Program. The two programs produced 39 graduates in 1984-85. In 1984-85, Lethbridge Community College began offering a two-year diploma program in child and youth care. Run on a temporary basis, the Lethbridge Community College program had an enrolment of 21 students in 1984-85.

TABLE 3

BASIC EDUCATION PROGRAMS FOR CHILD CARE WORKERS IN ALBERTA[1]

	1982-83	1983-84	1984-85
DIPLOMA CHILD CARE PROGRAMS			
Grant McEwan Community College (Program Length: 2 years)			
Enrolments:			
1st Year	52	67	74
2nd Year	84	55	40
Graduates:	28	30	23
Lethbridge Community College (Program Length: 2 years)			
Enrolments:			
1st Year	-	-	21
Graduates:	-	-	-
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	42	31	24
2nd Year	18	30	21
Graduates:[2]	7	28	16
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	35	58	39

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[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-1985**. Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] The number of graduates may exceed second year enrolment due to the manner in which second year student status is calculated and yearly graduate statistics are compiled.

b) Continuing Education Programs:

The Child Care Workers' Association of Alberta held its annual conference and a number of workshops in 1985. Continuing education programs were also offered by a number of other organizations dealing with various aspects of child care. Among the organizations offering programs were: Grant MacEwan Community College, Alberta Social Services and Community Health, Catholic Social Services, the Hull Institute, and Alberta Association of Child Care Centres.

CHIROPRACTORS

I. OVERVIEW

Definition: A chiropractor practises the philosophy, science, and art of analyzing and the adjustment or manipulation of the human spinal column and other structures incidental thereto, and includes the use of x-ray and analytical instruments in relation thereto; "adjustment or manipulation" means a calculated procedure, force or thrust designed to move one structure in relation to another, particularly of the spinal column, to remove subluxations or fixations and to mobilize the affected structures for the purpose of restoring or maintaining health.

(Source: **The Chiropractic Profession Act**, RSA 1980)

There were 297 chiropractors who were residing in Alberta and registered with the Alberta Chiropractic Association (A.C.A.) in 1985.[1] About 54 percent of the chiropractors were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of chiropractors registered in Alberta increased by 2.1 percent between 1983 and 1985 while the provincial population grew by 0.7 percent during the same period. The provincial chiropractor-to-population ratio was 1: 7,987 in 1985.

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[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the A.C.A. and residing in Alberta as of May 31, 1985. Excludes inactive, honorary, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

Alberta Chiropractic Association
516, 10235 - 101 Street
Edmonton, Alberta T5J 3G1

and

Chiropractic Appraisal Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta T5J 3W7

b) **Professional Association:**

Alberta Chiropractic Association
516, 10235 - 101 Street
Edmonton, Alberta T5J 3G1

President: Dr. K.R. Harrison

c) **Legislation:**

Under the authority of the **Chiropractic Profession Act**, all individuals who wish to practice as chiropractors must register with the Alberta Chiropractic Association (A.C.A.). Annual re-registration with the Association is required of all chiropractors in order to continue to practice in Alberta.

The A.C.A. is responsible for regulating the conduct of its members and for maintaining professional discipline. The Chiropractic Appraisal Board, a provincial government certification body, sets the educational qualifications required for registration with the A.C.A. Any individual who is a graduate of a training program approved by the Board, and who passes an examination prescribed by the Board, or who is a member of the Canadian Chiropractic Association can be certified by the Board as being eligible for registration.

Although a new **Chiropractic Profession Act** has been passed, it has not yet been proclaimed. When proclaimed, it will replace the existing Act. The Chiropractic Appraisal Board will also cease to exist when the new legislation comes into effect.

III. PERSONNEL DATA

TABLE 1 NUMBER OF CHIROPRACTORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	58,400	1: 6,489
2 (Lethbridge)	26	118,900	1: 4,573
3 (Pincher Creek)	4	38,800	1: 9,700
4 (Hanna)	1	12,900	1:12,900
5 (Drumheller)	7	41,300	1: 5,900
6 (Calgary)[3]	10	71,457	1: 7,146
7 (Stettler)	6	42,900	1: 7,150
8 (Red Deer)	25	136,100	1: 5,444
9 (Banff)	2	23,700	1:11,850
10 (Camrose)	16	82,300	1: 5,144
11 (Edmonton)[4]	9	119,884	1:13,320
12 (Fort McMurray)	5	93,900	1:18,780
13 (Whitecourt)	7	56,900	1: 8,128
14 (Hinton)	3	27,200	1: 9,067
15 (Grande Prairie)	7	139,200	1:19,886
Census Metropolitan Area of Calgary	85	625,143[5]	1: 7,355
Census Metropolitan Area of Edmonton	75	683,016[5]	1: 9,107
PROVINCIAL TOTAL	297	2,372,000	1: 7,987

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the A.C.A. and residing in Alberta as of May 31, 1985. Excludes inactive, honorary, and retired members.

[2] Source: "Albert Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR CHIROPRACTORS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	291	299	297
% Change in Number of Registered Personnel	3.6%	2.7%	-0.7%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 8,098	1: 7,901	1: 7,987
- Western Canada[4]	1: 9,284	-	1: 8,501
- Canada[5]	1:12,393	-	-

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the Alberta Chiropractic Association and residing in Alberta. Excludes inactive, honorary, and retired members.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Sources: (i) **Rollcall 85**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee.

[5] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is no training program for chiropractors in Alberta. The only institution where chiropractic training can be obtained in Canada is the Canadian Memorial Chiropractic College in Toronto, which offers a four-year program. Many of Alberta's chiropractors received their chiropractic training in the United States.

b) Continuing Education Programs:

The Alberta Chiropractic Association sponsored seminars dealing with relevant topics for its members in 1985. Continuing and post-graduate education programs were also offered by most colleges of chiropractic, and members are encouraged to upgrade their skills on an ongoing basis through any accredited teaching body.

COMBINED LABORATORY AND X-RAY TECHNICIANS

I. OVERVIEW

Definition: The combined technician is a hospital worker trained to perform laboratory and x-ray work in smaller hospitals that do not have sufficient volume or range of work to warrant their employing both a laboratory technologist and an x-ray technician.

(Source: **Saskatchewan Health Manpower Annual Report 1976**. Regina, Saskatchewan: Saskatchewan Health, 1976)

Since registration with the Alberta Society of Certified Combined Technicians is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 349 combined laboratory and x-ray technicians practicing in Alberta in 1985.[1] Approximately 42 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial personnel-to-population ratio was 1: 6,797 in 1985. In major urban centers, most of the services provided by combined laboratory and x-ray technicians are also provided by medical laboratory technologists and medical radiation technologists (see chapters on Medical Laboratory Technologists and Medical Radiation Technologists).

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Health Disciplines Board
Professions and Occupations Bureau
John E. Brownlee Building
9th Floor, 10365 - 97 Street
Edmonton, Alberta
T5J 3W5

b) Professional Association:

Alberta Society of Certified Combined Technicians
P.O. Box 2575
Drayton Valley, Alberta
T0E 0M0

President: Ms. Colleen Sekura

c) Legislation:

In November 1984 the Legislative Assembly of Alberta designated the discipline of combined laboratory and x-ray technicians under the **Health Disciplines Act**. The Minister Responsible for Professions and Occupations established a committee for this discipline in August 1985. The committee is in the process of preparing draft regulations for this discipline which will be presented to the Health Disciplines Board.

III. PERSONNEL DATA

TABLE 1 NUMBER OF COMBINED LABORATORY AND X-RAY TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	58,400	1: 19,467
2 (Lethbridge)	17	118,900	1: 6,994
3 (Pincher Creek)	6	38,800	1: 6,467
4 (Hanna)	7	12,900	1: 1,843
5 (Drumheller)	6	41,300	1: 6,883
6 (Calgary)[3]	10	71,457	1: 7,146
7 (Stettler)	21	42,900	1: 2,043
8 (Red Deer)	24	136,100	1: 5,671
9 (Banff)	10	23,700	1: 2,370
10 (Camrose)	23	82,300	1: 3,578
11 (Edmonton)[4]	17	119,884	1: 7,052
12 (Fort McMurray)	16	93,900	1: 5,869
13 (Whitecourt)	16	56,900	1: 3,556
14 (Hinton)	3	27,200	1: 9,067
15 (Grande Prairie)	25	139,200	1: 5,568
Census Metropolitan Area of Calgary	4	625,143[5]	1:156,286
Census Metropolitan Area of Edmonton	141	683,016[5]	1: 4,844
PROVINCIAL TOTAL	349	2,372,000	1: 6,797

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projection Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2

SELECTED MANPOWER STATISTICS FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	239[1]	305[2]	349[3]
% Change in Number of Practicing Personnel	-11.8%	27.6%	14.4%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,00[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios: Alberta	1: 9,860	1: 7,746	1: 6,797

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Service Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology offers a one-year combined laboratory and x-ray technology certificate program. The program produced 26 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Northern Alberta Institute of Technology (Program Length: 1 year)			
Enrolments:	29	37	51
Graduates:	22	25	26

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Alberta Society of Certified Combined Technicians held it's annual two-day convention which included lectures, workshops, and meetings related to various aspects of laboratory and x-ray technology. In addition, members were also encouraged to take part in continuing education programs offered by other organizations and institutions, such as the Southern Alberta Institute Technology.

DENTAL ASSISTANTS

I. OVERVIEW

Definition: Assist dentists in care and treatment of patients. Seat and prepare patient for dental treatment. Arrange instruments, materials and medications and hand them to the dentist. Keep oral operating area clear during dental procedure by using suction devices, water sprays, cotton rolls and holders, and by retraction of cheek and tongue. Prepare filling materials, using mechanical amalgamator and instruments and supply them to dentist as required. Comfort patient through reassuring conversation and actions. Give emergency treatment, as directed by dentist, for local and systemic distress. Advise patients on post-operative care, oral hygiene, and importance of diet and preventive dentistry. Sterilize instruments, using ovens, autoclaves and aseptic solutions. Pour, trim and mount plaster models from impressions taken by dentist and perform other dental laboratory procedures. Perform routine maintenance duties such as lubricating equipment, sharpening dental instruments, replacing expendable parts and cleaning equipment and treatment area. Expose, process and mount X-ray films. Polish teeth, apply fluoride to teeth and perform other intra-oral procedures, as permitted by training and by provincial legislation. Act as receptionist, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Dental Assistants Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 1,838 dental assistants practicing in the province in 1985.[1] Two-thirds of the dental assistants were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial dental assistant-to-population ratio was 1:1,291 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

Alberta Dental Assistants Association
(Certification Board Committee)
11914 - 86 Street
Edmonton, Alberta
T5B 3R2

b) **Professional Association:**

Alberta Dental Assistants Association
11914 - 86 Street
Edmonton, Alberta
T5B 3K2

President: Ms. Bev MacLean

c) **Legislation:**

The **Dental Profession Act** established the Dental Occupations Council consisting of two hygienists, two dentists, and two assistants. The representatives were appointed by their respective professional association. This group recommends to the Board of the Alberta Dental Association regulations regarding the duties, conditions of practice, standards of conduct and competency, and disciplinary procedures for dental assistants.

Currently, routine dental assisting does not require certification. Intra-oral functions, however, may only be provided by those dental assistants who have been certified by the Alberta Dental Assistants Association to do so.

Regulations giving the Alberta Dental Assistants Association the authority to register, license, and discipline dental assistants are in the draft stage.

III. PERSONNEL DATA

TABLE 1A NUMBER OF DENTAL ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	38	58,400	1:1,537
2 (Lethbridge)	93	118,900	1:1,278
3 (Pincher Creek)	20	38,800	1:1,940
4 (Hanna)	8	12,900	1:1,613
5 (Drumheller)	25	41,300	1:1,652
6 (Calgary)[3]	32	71,457	1:2,233
7 (Stettler)	15	42,900	1:2,860
8 (Red Deer)	81	136,100	1:1,680
9 (Banff)	17	23,700	1:1,394
10 (Camrose)	44	82,300	1:1,870
11 (Edmonton)[4]	54	119,884	1:2,220
12 (Fort McMurray)	60	93,900	1:1,565
13 (Whitecourt)	28	56,900	1:2,032
14 (Hinton)	12	27,200	1:2,267
15 (Grande Prairie)	63	139,200	1:2,210
Census Metropolitan Area of Calgary	566	625,143[5]	1:1,104
Census Metropolitan Area of Edmonton	682	683,016[5]	1:1,001
PROVINCIAL TOTAL	1,838	2,372,000	1:1,291

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF DENTAL ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	566	625,143	1: 1,104
Census Metropolitan Area of Edmonton	682	683,016	1: 1,001
Between 10,000 and 60,000			
Airdrie	6	10,431	1: 1,739
Camrose	16	12,751	1: 786
Fort McMurray	19	36,810	1: 1,937
Grande Prairie	29	25,056	1: 864
Leduc	17	12,926	1: 760
Lethbridge	70	59,901	1: 856
Lloydminster	8	10,557	1: 1,320
Medicine Hat	38	41,717	1: 1,098
Red Deer	58	52,620	1: 907
Spruce Grove	13	11,569	1: 890
Wetaskiwin	7	10,022	1: 1,432
Between 5,000 and 10,000			
Bonnyville	10	5,223	1: 522
Brooks	11	9,421	1: 856
Crownest Pass	7	7,577	1: 1,082
Drumheller	6	6,671	1: 1,112
Edson	4	7,110	1: 1,778
High River	8	5,114	1: 639
Hinton	8	8,904	1: 1,113
Innisfail	5	5,435	1: 1,087
Lacombe	3	5,954	1: 1,985
Peace River	8	6,043	1: 755
Ponoka	5	5,221	1: 1,044
Rocky Mountain House	7	5,126	1: 732
St. Paul	8	5,052	1: 632
Stettler	7	5,136	1: 734
Stony Plain	8	5,291	1: 661
Taber	3	6,384	1: 2,128
Vegreville	7	5,251	1: 750
Whitecourt	7	5,408	1: 773
Under 5,000	187	669,160	1: 3,578
TOTAL	1,838	2,372,000	1: 1,291

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL ASSISTANTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	1,795[1]	1,786[2]	1,838[3]
% Change in Number of Practicing Personnel	12.1%	-0.5%	2.9%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 1,313	1:1,323	1: 1,291
- Canada[6]	1:11,748	-	-

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985; and information collected retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Discipines Committee.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer 37-week dental assistant certificate training programs. The two programs produced 103 graduates in 1984-85. In addition, the Northern Alberta Institute of Technology offers a correspondence training program. This program, which is 20 months in length and is designed for dental assistants presently employed, had 284 students and 78 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DENTAL ASSISTANTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Northern Alberta Institute of Technology (Program Length: 9½ months)			
Enrolments:	71	63	76
Graduates:	68	59	65
Southern Alberta Institute of Technology (Program Length: 37 weeks)			
Enrolments:	40	40	40
Graduates:	33	34	38
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	101	93	103

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[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Alberta Dental Assistants Association provided various continuing education programs for members and non-members in 1985, and offered a number of seminars in conjunction with its annual convention.

Workshops and seminars organized by Local Dental Societies and the Alberta Dental Hygienists Association are opened to dental assistants. The University of Alberta also offers continuing education programs for dental assistants.

DENTAL HYGIENISTS

I. OVERVIEW

Definition: Provide preventive dental services and instruct patients in care of teeth and mouth. Scale and polish teeth to remove hard and soft deposits, using dental instruments and equipment. Polish fillings to remove tarnish and corrosion, using motorized apparatus. Apply topical agents and sealants to teeth to reduce decay. Conduct preliminary dental examination and record case history of patient. Record observed conditions and information for diagnosis and treatment planning by dentist. Instruct individuals and groups in home dental care and provide dietary counselling related to dental health. Expose, process and mount dental x-ray films. Take impressions of teeth for study models. Administer local anaesthetics, place, finish and polish fillings and remove sutures as permitted by training and by provincial legislation.[1]

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980).

Since registration with the Alberta Dental Hygienists Association is not mandatory, the survey of health and social personnel working in Alberta conducted on March 31, 1985 by the Alberta Health and Social Services Discipline Committee, is used as an alternative source of manpower information.

There were 598 dental hygienists practicing in the province in 1985.[2] About 69 percent of the dental hygienists were employed in the Census Metropolitan areas of Calgary and Edmonton. The provincial dental hygienist-to-population ratio was 1:3,967 in 1985.

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[1] Alberta legislation does not permit dental hygienists to engage in activities mentioned in the last sentence.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Dental Hygienists Association
311 Woodvale Crescent S.W.
Calgary, Alberta
T2W 3L3

President: Ms. Marilyn Anderson

c) Legislation:

The **Dental Profession Act** established the Dental Occupations Council consisting of two hygienists, two dentists, and two assistants. The representatives were appointed by their respective professional association. This group recommends to the Board of the Alberta Dental Association regulations regarding the duties, conditions of practice, standards of conduct and competency, and disciplinary procedures for dental hygienists.

In order to practice in the province, dental hygienists must be graduates of the Dental Hygiene program at the University of Alberta. If they are graduates from other training programs, they must be certified by the Universities Co-ordinating Council.

Although registration and licensure are not mandatory at present, regulations giving the Alberta Dental Hygienists Association the authority to register, license, and discipline dental hygienists are in the draft stage.

III. PERSONNEL DATA

TABLE 1A NUMBER OF DENTAL HYGIENISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	17	58,400	1: 3,435
2 (Lethbridge)	24	118,900	1: 4,954
3 (Pincher Creek)	6	38,800	1: 6,467
4 (Hanna)	4	12,900	1: 3,225
5 (Drumheller)	6	41,300	1: 6,883
6 (Calgary)[3]	7	71,457	1:10,208
7 (Stettler)	2	42,900	1:21,450
8 (Red Deer)	36	136,100	1: 3,781
9 (Banff)	3	23,700	1: 7,900
10 (Camrose)	21	82,300	1: 3,919
11 (Edmonton)[4]	19	119,884	1: 6,310
12 (Fort McMurray)	20	93,900	1: 4,695
13 (Whitecourt)	3	56,900	1:18,967
14 (Hinton)	7	27,200	1: 3,886
15 (Grande Prairie)	12	139,200	1: 11,600
Census Metropolitan Area of Calgary	193	625,143[5]	1: 3,239
Census Metropolitan Area of Edmonton	218	683,016[5]	1: 3,133
PROVINCIAL TOTAL	598	2,372,000	1: 3,967

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF DENTAL HYGENISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	193	625,143	1: 3,239
Census Metropolitan Area of Edmonton	218	683,016	1: 3,133
Between 10,000 and 60,000			
Airdrie	1	10,431	1: 10,431
Camrose	7	12,751	1: 1,796
Fort McMurray	12	36,810	1: 3,068
Grande Prairie	6	25,056	1: 4,176
Leduc	3	12,926	1: 4,309
Lethbridge	14	59,901	1: 4,279
Lloydminster	8	10,557	1: 1,320
Medicine Hat	17	41,717	1: 2,454
Red Deer	30	52,620	1: 1,754
Spruce Grove	4	11,569	1: 2,892
Wetaskiwin	4	10,022	1: 2,506
Between 5,000 and 10,000			
Bonnyville	1	5,223	1: 5,223
Brooks	3	9,421	1: 3,140
Crownest Pass	0	7,577	-
Drumheller	4	6,671	1: 1,668
Edson	3	7,110	1: 2,370
High River	2	5,114	1: 2,557
Hinton	4	8,904	1: 2,226
Innisfail	1	5,435	1: 5,435
Lacombe	3	5,954	1: 1,985
Peace River	1	6,043	1: 6,043
Ponoka	1	5,221	1: 5,221
Rocky Mountain House	0	5,126	-
St. Paul	2	5,052	1: 2,526
Stettler	1	5,136	1: 5,136
Stony Plain	3	5,291	1: 1,764
Taber	2	6,384	1: 3,192
Vegreville	3	5,251	1: 1,750
Whitecourt	0	5,408	-
Under 5,000	47	669,160	1: 14,237
TOTAL	598	2,372,000	1: 3,967

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL HYGIENISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	503[1]	562[2]	598[3]
% Change in Number of Practicing Personnel	4.8%	11.8%	6.4%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 4,685	1: 4,204	1: 3,967
- Western Canada[6]	1: 5,368	1: 4,974	1: 4,714
- Canada[7]	1: 4,997	-	-

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[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Service Disciplines Committee, December 1984; and information collected retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Disciplines Committee.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Sources: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: The 1983 and 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia. Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of employers conducted by the Alberta Health and Social Services Disciplines Committee.
The 1985 information is based on: (i) **Rollcall 85**, Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

[7] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a two-year dental hygiene diploma program. The program produced 35 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL HYGIENISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	43	42	43
2nd Year	40	30	35
Graduates	39	30	35

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

An annual convention was held by the Alberta Dental Hygienists Association. Regional societies of the Association also offered continuing education courses. A number of speakers were invited to the meetings to discuss relevant topics. The University of Alberta, Local Dental Societies, and the Alberta Dental Association also offered several continuing education programs for dental hygienists.

DENTAL TECHNICIANS

I. OVERVIEW

Definition: Make and repair dentures and other dental devices. Fabricate full and partial dentures, using wax and plaster models, dental surveyors, articulators (fitting devices) and electric grinders and polishers. Shape metal, vulcanite or plastic plates for dentures. Mount porcelain or plastic teeth in plates using knowledge of size, shape, shade and colour. Finish dentures on grinding and buffing wheels. Construct metal clasps, inlays, bridgework and other aides according to specifications. Join breaks, make additions or reline denture bases to repair dentures.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 145 dental technicians who were residing in Alberta and registered with the Dental Technicians Board located in 1985.[1] About 84 percent of the dental technicians were located in the Census Metropolitan Areas of Calgary and Edmonton. Rural areas of the province have their dental laboratory work done through mail order by dental technicians in the major cities.

The provincial dental technician-to-population ratio was 1:16,359 in 1985. Some of the services, such as the making of complete dentures, performed by dental technicians can also be provided by denturists (see chapter on Denturists).

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[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of October 4, 1985. Number includes dental technicians who were also denturists.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Dental Technicians Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Board Chairman: Dr. T. Curry

b) Professional Association:

Alberta Society of Registered Dental Technicians
211, 11523 - 100 Avenue
Edmonton, Alberta
T5K 0S8

President: Mr. Gerry Fedorchuk

c) Legislation:

Under the authority of the **Dental Technicians Act**, all individuals who wish to practice as dental technicians must register with the Dental Technicians Board, a provincial government licensing body. Annual re-registration with the Board is required for dental technicians in order to continue to practice in Alberta.

The Dental Technicians Board is responsible for regulating the conduct of dental technicians and for maintaining professional discipline. It also sets the educational qualifications required for registration.

III. PERSONNEL DATA

TABLE 1

NUMBER OF DENTAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	58,400	1: 58,400
2 (Lethbridge)	9	118,900	1: 13,211
3 (Pincher Creek)	1	38,800	1: 38,800
4 (Hanna)	0	12,900	-
5 (Drumheller)	0	41,300	-
6 (Calgary)[3]	3	71,457	1: 23,819
7 (Stettler)	0	42,900	-
8 (Red Deer)	1	136,100	1:136,100
9 (Banff)	0	23,700	-
10 (Camrose)	3	82,300	1: 27,433
11 (Edmonton)[4]	2	119,884	1:119,884
12 (Fort McMurray)	0	93,900	-
13 (Whitecourt)	1	56,900	1: 56,900
14 (Hinton)	0	27,200	-
15 (Grande Prairie)	2	139,200	1: 69,600
Census Metropolitan Area of Calgary	50	625,143[5]	1: 12,502
Census Metropolitan Area of Edmonton	72	683,016[5]	1: 9,486
PROVINCIAL TOTAL	145	2,372,000	1: 16,359

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[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of October 24, 1985. Number includes dental technicians who were also denturists.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL TECHNICIANS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	148	147	145
% Change in Number of Registered Personnel	1.4%	-0.7%	-1.4%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios: Alberta	1:15,922	1:16,071	1:16,359

[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In order to become a dental technician, an individual must pass the examination set by the Dental Technicians Board and must have either five years of practical experience, of which one year is in Alberta, or a two-year dental technician diploma plus three years of practical experience.

A two-year dental laboratory technology diploma program is offered at the Northern Alberta Institute of Technology (N.A.I.T.). The first year of the program is a "core" year with the denturist technology diploma program. The program produced 12 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL TECHNICIANS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	11	12	15
Graduates:	8	12	12

[1] Source: **Alberta Health and Social Service Training Program Inventory 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Dental Technicians Society offered various continuing education programs for its members in 1985.

DENTISTS

I. OVERVIEW

Definition: The work of dentists is concerned with examining, diagnosing, preventing and treating ailments or abnormalities of gums and teeth including oral surgery.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,186 dentists who were residing in Alberta and registered with the Alberta Dental Association (A.D.A.) in 1985.[1] Of these dentists, 88 percent were general practitioners and 12 percent were specialists. The number of dentists by specialty is shown in the table on page 73. About 69 percent of the dentists were graduates of the Faculty of Dentistry, University of Alberta, 24 percent were graduates of dental training programs in other Canadian provinces, and 7 percent were graduates of schools of dentistry in other countries.

About 70 percent of the dentists were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of dentists registered in Alberta increased by 4.2 percent between 1983 and 1985 while the provincial population grew by 0.7 percent during the same period. The provincial dentist-to-population ratio was 1:2,000 in 1985.

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1985. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

b) Professional Association:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

President: Dr. Brian Sigstead

c) Legislation:

Under the authority of the **Dental Profession Act**, which was proclaimed on October 10, 1984, all individuals who wish to practice as dentists must register with the Alberta Dental Association (A.D.A.). Annual re-registration with the Association is required in order for dentists to continue to practice in Alberta.

The A.D.A. is responsible for regulating the conduct of its members and for maintaining professional discipline. The **Dental Profession Act** sets the educational qualifications required for registration with the A.D.A. Post-basic educational qualifications required for registration as a dental specialist are set in the regulation of the Act. In addition, the Association has the authority to prescribe continuing education programs which must be completed by its members in order to qualify for re-registration. The Universities Coordinating Council is responsible for the certification of specialists.

III. PERSONNEL DATA

TABLE 1A

NUMBER OF DENTISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	20	58,400	1: 2,920
2 (Lethbridge)	51	118,900	1: 2,331
3 (Pincher Creek)	17	38,800	1: 2,282
4 (Hanna)	2	12,900	1: 6,450
5 (Drumheller)	13	41,300	1: 3,177
6 (Calgary)[3]	16	71,457	1: 4,466
7 (Stettler)	12	42,900	1: 3,575
8 (Red Deer)	57	136,100	1: 2,388
9 (Banff)	9	23,700	1: 2,633
10 (Camrose)	24	82,300	1: 3,429
11 (Edmonton)[4]	30	119,884	1: 3,996
12 (Fort McMurray)	31	93,900	1: 3,029
13 (Whitecourt)	19	56,900	1: 2,995
14 (Hinton)	11	27,200	1: 2,473
15 (Grande Prairie)	38	139,200	1: 3,663
Census Metropolitan Area of Calgary	383	625,143[5]	1: 1,632
Census Metropolitan Area of Edmonton	453	683,016[5]	1: 1,508
PROVINCIAL TOTAL	1,186	2,372,000	1: 2,000

---

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1985. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF DENTISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	383	625,143	1: 1,508
Census Metropolitan Area of Edmonton	453	683,016	1: 1,632
Between 10,000 and 60,000			
Airdrie	4	10,431	1: 2,608
Camrose	9	12,751	1: 1,417
Fort McMurray	9	36,810	1: 4,090
Grande Prairie	15	25,056	1: 1,670
Leduc	7	12,926	1: 1,847
Lethbridge	37	59,901	1: 1,619
Lloydminster	6	10,557	1: 1,760
Medicine Hat	19	41,717	1: 2,196
Red Deer	38	52,620	1: 1,385
Spruce Grove	9	11,569	1: 1,285
Wetaskiwin	5	10,022	1: 2,004
Between 5,000 and 10,000			
Bonnyville	4	5,223	1: 1,306
Brooks	4	9,421	1: 2,355
Crowsnest Pass	3	7,577	1: 2,526
Drumheller	4	6,671	1: 1,668
Edson	5	7,110	1: 1,422
High River	3	5,114	1: 1,705
Hinton	5	8,904	1: 1,781
Innisfail	4	5,435	1: 1,359
Lacombe	3	5,954	1: 1,985
Peace River	4	6,043	1: 1,511
Ponoka	4	5,221	1: 1,305
Rocky Mountain House	4	5,126	1: 1,282
St. Paul	6	5,052	1: 842
Stettler	3	5,136	1: 1,712
Stony Plain	4	5,291	1: 1,323
Taber	3	6,384	1: 2,128
Vegreville	2	5,251	1: 2,626
Whitecourt	3	5,408	1: 1,803
Under 5,000	128	669,160	1: 5,228
TOTAL	1,186	2,372,000	1: 2,000

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1985. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A..

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	1,138	1,148	1,186
% Change in Number of Registered Personnel	4.7%	0.9%	3.3%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
Percent Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratio:			
- Alberta	1:2,071	1:2,058	1:2,000
- Western Canada[4]	1:1,965	1:1,952	1:1,916
- Canada[5]	1:2,039	-	

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1983, 1984, and 1985. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: The 1983 and 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to dentists registered with their respective provincial professional associations.
The 1985 information is based on: (i) **Rollcall 85**, Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

[5] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year Doctor of Dental Surgery (D.D.S.) degree program. Two years of "pre-dentistry" university preparation is a pre-requisite before acceptance into the program. The program produced 44 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	51	51	52
2nd Year	50	53	47
3rd Year	44	44	47
4th Year	48	48	45
Graduates:	48	46	44

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[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Alberta Dental Association requires its members to participate in continuing education programs. The Continuing Education Department of the Faculty of Dentistry at the University of Alberta offered various dentistry courses.

Local Dental Societies presented courses on a monthly basis throughout most of the year. The courses covered a broad range of relevant topics.

Specialty societies and other organizations also offer continuing education courses in Alberta on occasion. In addition, some dentists attend courses in other provinces and in the United States.

APPENDIX

DENTISTS BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1985[1]

Specialty	Number of Dentists	Personnel-to-Population Ratio
Dental Public Health	3	1: 790,667
Endodontics	15	1: 158,133
Oral Pathology	4	1: 593,000
Oral Radiology	2	1:1,186,000
Oral Surgery	20	1: 118,600
Orthodontics	51	1: 46,510
Paedodontics	15	1: 158,133
Periodontics	20	1: 118,600
Prosthodontics	16	1: 148,250
Specialty Total	146	1: 16,247
General Practice	1,040	1: 2,281
GRAND TOTAL	1,186	1: 2,000

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1985. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

DENTURISTS

I. OVERVIEW

Definition: Design, construct, fit and repair dentures. Measure patient's jaws to determine size and shape of dentures using face bows, dental articulators and other devices. Make impression and mould of teeth, gums and jaws and design dentures. Direct other workers to construct dentures. Fit, adjust and repair dentures. Construct dentures, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 132 certified denturists (formerly known as certified dental mechanics) who were residing in Alberta and registered with the Board of Examiners for Certified Dental Mechanics in 1985.[1] About 54 percent of the denturists were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of denturists certified in Alberta decreased by 14.8 percent between 1983 and 1985 while the provincial population grew by 0.7 percent during the same period. The provincial denturists-to-population ratio was 1:17,970 in 1985.

Some of the services performed by denturists, such as the making of complete dentures, are also provided by dental technicians. Similarly, some other functions of denturists, such as taking impressions for complete dentures, are also handled by dentists (see chapters on Dental Technicians and Dentists).

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[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta as of October 4, 1985. Number includes denturists who were also dental technicians.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Board of Examiners for Certified
Dental Mechanics
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Board Chairman: Mr. Elmer Abele

b) Professional Association:

Denturist Society of Alberta
201 Century Centre
2 Athabascan Avenue
Sherwood Park, Alberta
T8A 4E3

President: Mr. Kenneth A. Moore

c) Legislation:

In December 1981, the **Dental Mechanics Amendment Act** was passed and assented to. This Act amended the **Dental Mechanics Act** by permitting dental mechanics to identify themselves as "denturists".

Under the authority of the **Dental Mechanics Act**, all individuals who wish to practice as denturists in the province must be certified by and registered with the Board of Examiners for Certified Dental Mechanics, a provincial government licensing body. Registration with the Denturist Society of Alberta is voluntary.

The Board is responsible for regulating the conduct of denturists and for maintaing professional discipline and it is empowered to re-examine any denturist at any time and to suspend or cancel his certification if warranted. The Board also sets the educational qualifications required for certification as a denturist in Alberta.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTURISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	58,400	1:14,600
2 (Lethbridge)	9	118,900	1:13,211
3 (Pincher Creek)	0	38,800	-
4 (Hanna)	1	12,900	1:12,900
5 (Drumheller)	4	41,300	1:10,325
6 (Calgary)[3]	1	71,457	1:71,457
7 (Stettler)	4	42,900	1:10,725
8 (Red Deer)	13	136,100	1:10,469
9 (Banff)	0	23,700	-
10 (Camrose)	6	82,300	1:13,717
11 (Edmonton)[4]	4	119,884	1:29,971
12 (Fort McMurray)	5	93,900	1:18,780
13 (Whitecourt)	5	56,900	1:11,380
14 (Hinton)	2	27,200	1:13,600
15 (Grande Prairie)	3	139,200	1:46,400
Census Metropolitan Area of Calgary	28	625,143[5]	1:22,327
Census Metropolitan Area of Edmonton	43	683,016[5]	1:17,970
PROVINCIAL TOTAL	132	2,372,000	1:17,970

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[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta as of October 4, 1985. Number includes denturists who were also dental technicians.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTURISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	155	136	132
% Change in Number of Registered Personnel	-0.7%	-12.3%	-2.9%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1:15,203	1:17,371	1:17,970
- Western Canada[4]	-	-	1:16,983

[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: (i) **Rollcall 85**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are two routes that a person may take in order to become a denturist in Alberta. One is to apprentice for five years under the supervision of a certified denturist. During this time students are required to complete examinations at four levels conducted by the Board of Examiners for Certified Dental Mechanics. The other is to enrol in a two-year training program offered by the Northern Alberta Institute of Technology. Upon completion of this program, the graduate is required to apprentice for two years under the supervision of a certified denturist. During this time the graduates are required to complete examinations at four levels. The program produced 13 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTURISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	19	19	18
Graduates:	9	12	13

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Denturist Society of Alberta, offered various continuing education programs for its members in 1985.

DIETARY TECHNICIANS

I. OVERVIEW

Definition: Assist in the planning and supervision of food service programs in governmental, institutional and commercial establishment. Plan menus and diets, under direction of dietitian or nutritionist, to provide required food and nutrients to individuals and groups. Arrange work schedules and assist in supervision of those engaged in preparation and serving of meals. Purchase or requisition food, equipment and other supplies. Maintain food-cost-control and other operational records to assist in improving efficiency and quality of food service system. Inspect storage facilities and work areas to ensure observance of sanitation, safety and security standards. Maintain attendance and personnel records and assist with inventory of supplies and equipment.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Society of Dietary Technicians is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 248 dietary technicians practicing in Alberta in 1985.[1] About 53 percent of all dietary technicians were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial dietary technician-to-population ratio was 1:9,565 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

None.

b) **Professional Association:**

Alberta Society of Dietary Technicians
P.O. Box 3791, Station "D"
Edmonton, Alberta
T5L 4J8

or

Alberta Society of Dietary Technicians
P.O. Box 2353
Calgary, Alberta
T2P 2M6

President: Ms. Bonnie Johnson

c) **Legislation:**

There is no legislation regulating dietary technicians in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DIETARY TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	58,400	1:11,680
2 (Lethbridge)	11	118,900	1:10,809
3 (Pincher Creek)	4	38,800	1: 9,700
4 (Hanna)	4	12,900	1: 3,225
5 (Drumheller)	5	41,300	1: 8,260
6 (Calgary)[3]	2	71,457	1:35,729
7 (Stettler)	7	42,900	1: 6,129
8 (Red Deer)	18	136,100	1: 7,561
9 (Banff)	4	23,700	1: 5,925
10 (Camrose)	16	82,300	1: 5,144
11 (Edmonton)[4]	5	119,884	1:23,977
12 (Fort McMurray)	6	93,900	1:15,650
13 (Whitecourt)	6	56,900	1: 9,483
14 (Hinton)	1	27,200	1:27,200
15 (Grande Prairie)	22	139,200	1: 6,327
Census Metropolitan Area of Calgary	59	625,143[5]	1:10,596
Census Metropolitan Area of Edmonton	73	683,016[5]	1: 9,356
PROVINCIAL TOTAL	248	2,372,000	1: 9,565

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETARY TECHNICIANS IN ALBERTA 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	245[1]	242[2]	248[3]
% Change in Number of Practicing Personnel	4.7%	-1.2%	2.5%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios: - Alberta	1: 9,618	1: 9,762	1: 9,565

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "September 30, 1984 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology (N.A.I.T.) and the Southern Alberta Institute of Technology (S.A.I.T.) offer a two-year program to train dietary technicians. The program at N.A.I.T. is known as the dietary diploma program. The program at S.A.I.T. is known as the dietary service technology diploma program. The two programs together produced 40 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DIETARY TECHNICIANS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	31	26	25
2nd Year	23	29	25
Graduates:	20	26	23
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	39	35	37
2nd Year	20	25	20
Graduates:	20	24	17
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	40	50	40

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[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Alberta Society of Dietary Technicians held its annual general meeting and a two-day seminar dealing with a number of topics pertaining to dietary technicians. The Alberta Registered Dietitians Association also invited members of the Alberta Society of Dietary Technicians to attend some of its seminars.

DIETITIANS/NUTRITIONISTS

I. OVERVIEW

Definition: Dietitians

Plan and supervise food service programs in governmental, institutional and commercial establishments to provide nutritionally adequate quality food. Plan diets and menus and evaluate clients' acceptance. Plan and submit budget and manage and control operating costs. Establish and maintain standards of food production and service, sanitation, safety and security. Supervise workers and direct efficient use of personnel and equipment. Institute measures to improve efficiency and quality of food service system. Plan, conduct and evaluate orientation and in-service training programs. Determine food, equipment and supply requirements. Administer established personnel policies. Plan layout designs and determine equipment requirements for new or renovated food services facilities. Prepare material on nutritional value of foods, methods of preparation and recipes, if required.

Nutritionists

Provide consulting services to community and organize, plan and conduct programs concerning nutrition to assist in promotion of health and prevention of disease. Assess nutritional needs and available resources of community. Develop and implement community programs concerning nutrition. Advise health and other agencies on nutritional and food services standards of their food programs. Counsel individuals and families in nutritional principles, diet, food selection and economical buying practices. Interpret and evaluate current research relating to nutrition and food service systems management to public and to staff. Conduct or participate in in-service education. Plan, conduct and evaluate nutrition education programs for public. Prepare technical publications and publications for the public concerning food and nutrition. Plan, conduct and evaluate dietary studies and participate in studies of diseases with nutrition component. Plan or participate in funding programs and recommend budget. Manage and control financial resources.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 366 dietitians/nutritionists who were residing in Alberta and registered with the Alberta Registered Dietitians Association (A.R.D.A.) in 1985.[1] Registration with the A.R.D.A. is not mandatory in order to practice in the province. Not all registered dietitians/nutritionists practice in the health care and social service sector. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 222 dietitians and nutritionists employed in health and social service agencies and institutions in 1985.[2]

About 79 percent of the registered dietitians/nutritionists were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of registered dietitians/nutritionists grew by 10.9 percent between 1983 and 1985, while the provincial population increased by 0.7 percent during the same period. The provincial registered dietitian/nutritionist-to-population ratio was 1:6,481 in 1985.

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1985.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

b) Professional Association:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

President: Mrs. Therisa K. Holt

or

P.O. Box 2208, Station "M"
Calgary, Alberta
T2P 2M4

c) Legislation:

Currently there is no mandatory registration requirement of dietitians/nutritionists practising in the province. However, under the authority of the **Registered Dietitians Act**, individuals may register with the Alberta Registered Dietitians Association (A.R.D.A.). Only those dietitians/nutritionists who are registered with the Association may use the title of "Registered Dietitian." Annual re-registration with the Association is required of dietitians/nutritionists in order to continue to use the title of "Registered Dietitian."

The A.R.D.A. is responsible for regulating the conduct of its members for maintaining professional discipline. The Universities Co-ordinating Council sets the educational qualifications required for registration with the A.R.D.A. In addition, the **Registered Dietitians Act** stipulates additional educational and experiential qualifications for membership in the Association.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DIETITIANS/NUTRITIONISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	58,400	1: 8,343
2 (Lethbridge)	7	118,900	1:16,986
3 (Pincher Creek)	5	38,800	1: 7,760
4 (Hanna)	1	12,900	1:12,900
5 (Drumheller)	2	41,300	1:20,650
6 (Calgary)[3]	5	71,457	1:14,291
7 (Stettler)	1	42,900	1:42,900
8 (Red Deer)	17	136,100	1: 8,006
9 (Banff)	2	23,700	1:11,850
10 (Camrose)	8	82,300	1:10,288
11 (Edmonton)[4]	9	119,884	1:13,320
12 (Fort McMurray)	7	93,900	1:13,414
13 (Whitecourt)	1	56,900	1:56,900
14 (Hinton)	0	27,200	-
15 (Grande Prairie)	5	139,200	27,840
Census Metropolitan Area of Calgary	135	625,143[5]	1: 4,631
Census Metropolitan Area of Edmonton	154	683,016[5]	1: 4,435
PROVINCIAL TOTAL	366	2,372,000	1: 6,481

---

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the Alberta Registered Dietitians Association and residing in Alberta as of April 30, 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETITIANS/NUTRITIONISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	330	339	366
% Change in Number of Registered Personnel	6.1%	2.7%	8.0%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 7,140	1: 6,969	1: 6,481
- Western Canada[4]	1: 6,535	-	-
- Canada[5]	1: 5,814	-	-

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1983, 1984, and 1985.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Sources: (i) **Rollcall 83**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. The British Columbia figures refer to personnel who were registered (registration is not compulsory) and practicing. The figures for Saskatchewan, Manitoba, and Alberta refer to personnel registered with their respective provincial professional associations.

[5] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Faculty of Home Economics at the University of Alberta offers a four-year baccalaureate degree program in foods and nutrition. The program produced 23 graduates in 1984-85. The University of Alberta also offers a masters degree program in foods and a masters degree program in nutrition. There was one graduate from these two programs in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR DIETITIANS/NUTRITIONISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
A. BACCALAUREATE PROGRAM			
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	30	39	33
2nd Year	35	39	51
3rd Year	16	34	55
4th Year	41	32	33
Graduates	27	22	23
B. MASTERS PROGRAM			
University of Alberta Masters of Science in Home Economics: Foods (Program Length: 2 years)			
Enrolments:	2	3	4
Graduates:	1	1	1

TABLE 3, CONTINUED

University of Alberta Masters of Science in Home Economics: Nutrition (Program Length: 2 years)			
Enrolments:	4	6	9
Graduates:	2	2	-
PROVINCIAL TOTAL			
Number of Masters Programs: 2			
Graduates:	3	3	1

---

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

A number of continuing education sessions were operated by continuing education committees of the Alberta Registered Dietitians Association for dietitians/nutritionists. Other agencies and organizations, such as the Faculty of Extension of the University of Alberta and the Alberta Hospital Association also offered various continuing education programs related to dietetics and nutrition.

EMERGENCY MEDICAL TECHNICIANS

I. OVERVIEW

Definition: An emergency attendant:

Gives emergency care to sick and injured persons at the scene of the accident or illness and during transport to the hospital. Assists with lifting of patient onto wheeled cart or stretcher and into and out of ambulance. Gives first aid such as mouth-to-mouth resuscitation, cardiac massage, administration of oxygen and application of bandages and splints. Assists with rescue work, if required. Performs duties of ambulance driver if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Emergency medical technicians - ambulance (EMT-A) are ambulance attendants who have received training to provide emergency services at the basic life support level.[1] In Alberta, this means training at the EMT-A level provided at the Southern Alberta Institute of Technology.

Emergency medical technicians - paramedic (EMT-P) are ambulance attendants who have received training to provide emergency services at the advanced life support level.[2]

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[1] "Basic life support is an emergency first aid procedure that consists of recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life until a victim recovers sufficiently to be transported or until advanced life support is available." (American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." **Journal of the American Medical Association**, Vol. 227, No. 7, Supplement; 1974: p. 84).

[2] According to the American Heart Association, advanced life support for the patient in cardiac arrest consists of the following elements: basic life support, use of adjunctive equipment for ventilation and circulation, cardiac monitoring for dysrhythmia recognition and control, defibrillation, establishment and maintenance of an intravenous infusion lifeline, employment of definitive therapy, including drug administration and stabilization of the patient's condition. (See: American Heart Association, "Standard for cardiopulmonary resuscitation and emergency cardiac care." **Journal of the American Medical Association**, Vol. 227, No. 17, Supplement; 1974.)

In Alberta this means training at the EMT-P level provided at the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology.

In Alberta, municipalities have the power to set the level of ambulance services beyond a legislated minimum standard. Some municipalities have established ambulance services at the advanced life support level, and others have not. Municipalities which have established ambulance services at the advanced life support level are: Airdrie, Calgary, Edmonton, Fort McMurray, Grande Prairie, High River, Innisfail, Medicine Hat, and St. Albert. This factor partly accounts for the very uneven distribution of emergency paramedic personnel in Alberta.

In 1985, there were 728 salaried and 266 volunteer emergency medical technicians practicing in the province, according to the survey of health and social service personnel working in Alberta conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee.[1] The provincial emergency medical technician-to-population ratio was 1:2,386. Salaried personnel refer to those who received a salary. Volunteer personnel refer to those who did not receive a salary but might have received a stipend, standby fee, or honorarium. It should be noted that there were additional ambulance attendants who had lower levels of training than emergency medical technicians.

Of the 728 salaried emergency medical technicians, 452 had EMT-A level of training and 276 had EMT-P level of training. Of the 266 volunteer emergency medical technicians, 260 had EMT-A level of training and 6 had EMT-P level of training.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

Health Disciplines Board
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W5

b) **Professional Association:**

Registered Emergency Medical Technicians
Association of Alberta
P.O. Box 1537
Lethbridge, Alberta
T1J 4K2

President: Ms. Joyce Holt

c) **Legislation:**

There are two pieces of legislation which deal with ambulance services and ambulance attendants.

The **Motor Transport Act** requires that every "Class A ambulance" in the province must be staffed by at least one qualified attendant who holds at least a St. John's Ambulance Certificate.

The **Municipal Government Act** allows municipalities to provide ambulance services which exceed the minimum standards set forth in the **Motor Transport Act**. Some municipalities have passed ambulance service regulations under this Act.

In 1982, the Health Disciplines Board recommended to the Minister Responsible for Professions and Occupations that the discipline of emergency medical technicians - paramedic be designated under the **Health Disciplines Act**. In 1984, the Board recommended to the

Minister that the discipline of emergency medical technician - ambulance be a designated health discipline. The Board also recommended that both emergency medical technicians - paramedic and emergency medical technicians - ambulance be regulated under the same health discipline committee. In November 1984, the designation of emergency medical technicians - paramedic was amended to emergency medical technicians so that both groups, EMT-P and EMT-A, could be regulated together. In December 1984, the Minister Responsible for Professions and Occupations established a committee known as the Emergency Medical Technician Committee to develop regulations for the discipline.

In October 1985 the Lieutenant Governor in Council approved the regulations for the discipline of emergency medical technician under the **Health Disciplines Act**. The regulations came into effect in December 1985.

III. PERSONNEL DATA

TABLE 1A NUMBER OF EMERGENCY MEDICAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	58,400	1: 5,309
2 (Lethbridge)	84	118,900	1: 1,415
3 (Pincher Creek)	21	38,800	1: 1,848
4 (Hanna)	21	12,900	1: 614
5 (Drumheller)	25	41,300	1: 1,652
6 (Calgary)[3]	78	71,457	1: 916
7 (Stettler)	33	42,900	1: 1,300
8 (Red Deer)	109	136,100	1: 1,249
9 (Banff)	23	23,700	1: 1,030
10 (Camrose)	42	82,300	1: 1,960
11 (Edmonton)[4]	44	119,884	1: 2,725
12 (Fort McMurray)	68	93,900	1: 1,381
13 (Whitecourt)	27	56,900	1: 2,107
14 (Hinton)	8	27,200	1: 3,400
15 (Grande Prairie)	68	139,200	1: 2,047
Census Metropolitan Area of Calgary	170	625,143[5]	1: 3,677
Census Metropolitan Area of Edmonton	162	683,016[5]	1: 4,216
PROVINCIAL TOTAL	994	2,372,000	1: 2,386

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF EMERGENCY MEDICAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	170	625,143	1: 3,677
Census Metropolitan Area of Edmonton	162	683,016	1: 4,216
Between 10,000 and 60,000			
Airdrie	19	10,431	1: 549
Camrose	10	12,751	1: 1,257
Fort McMurray	19	36,810	1: 1,937
Grande Prairie	10	25,056	1: 2,506
Leduc	10	12,926	1: 1,293
Lethbridge	61	59,901	1: 982
Lloydminster	0	10,557	1: -
Medicine Hat	11	41,717	1: 3,792
Red Deer	57	52,620	1: 923
Spruce Grove	0	11,569	1: -
Wetaskiwin	2	10,022	1: 5,011
Between 5,000 and 10,000			
Bonnyville	23	5,223	1: 227
Brooks	9	9,421	1: 1,047
Crownest Pass	0	7,577	1: -
Drumheller	0	6,671	1: -
Edson	5	7,110	1: 1,422
High River	22	5,114	1: 232
Hinton	3	8,904	1: 2,968
Innisfail	16	5,435	1: 340
Lacombe	5	5,954	1: 1,191
Peace River	3	6,043	1: 2,014
Ponoka	6	5,221	1: 870
Rocky Mountain House	4	5,126	1: 1,292
St. Paul	6	5,052	1: 842
Stettler	6	5,136	1: 856
Stony Plain	19	5,291	1: 278
Taber	4	6,384	1: 1,596
Vegreville	8	5,251	1: 656
Whitecourt	3	5,408	1: 1,803
Under 5,000	321	669,160	1: 2,085
TOTAL	994	2,372,000	1: 2,386

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR EMERGENCY MEDICAL TECHNICIANS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	240[1]	902[2]	994[3]
% Change in Number of Practicing Personnel	N/A	N/A	10.2%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios: - Alberta	1: 9,819	1: 2,619	1: 2,386

[1] Source: "September 30, 1983 Survey of Employees of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The 1984 figure is substantially larger because the 1983 figure includes only EMT-P, and the 1984 figure includes both EMT-P and EMT-A.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Divisions Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer a two-year diploma training program in emergency medical technology - paramedic. The two programs produced 40 graduates in 1984-85.

The Southern Alberta Institute of Technology also offers a training program for emergency medical technicians - ambulance. This is an individualized computer managed learning program to allow students to study at their own pace before being tested at computer centres.

This program produced 179 graduates in 1984-85, including graduates from outreach programs.

TABLE 3 BASIC EDUCATION PROGRAMS FOR EMERGENCY MEDICAL TECHNICIANS (PARAMEDIC) IN ALBERTA[1]

	1982-83	1983-84	1984-85
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	25	17	19
2nd Year	25	24	18
Graduates:	25	24	14
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	28	30	29
2nd Year	29	26	29
Graduates:	32	28	26
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	57	52	40

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) **Continuing Education Programs:**

Continuing education programs are available through the Southern Alberta Institute of Technology, Red Deer College, and Lakeland College, as well as from in-service training programs. In addition, the Registered Emergency Paramedic Association of Alberta sponsored a program and a pre-hospital care seminar in conjunction with their annual meeting. Courses dealing with advanced cardiac life support were also provided for members of the association.

HEALTH RECORD ADMINISTRATORS

I. OVERVIEW

Definition: Compile and maintain medical records and statistics of hospital and clinic patients. Review clinical records for completeness and contact medical personnel to obtain missing data. Code, index and file records of diagnoses, diseases and treatments. Compile statistics, such as, reports on admissions, births, deaths, transfers and discharges. Release medical information to staff and authorized government agencies, insurance companies, physicians, hospitals and medical information and research centres. May brief and transcribe records. May testify in court to authenticate medical records.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Health Record Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 142 health record administrators practicing in Alberta in 1985.[1] About 44 percent of all health record administrators were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial health record administrator-to-population ratio was 1:16,704 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

None.

b) **Professional Association:**

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Mrs. Pat Tallman

c) **Legislation:**

There is no legislation regulating health record administrators in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF HEALTH RECORD ADMINISTRATORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	58,400	1:29,200
2 (Lethbridge)	6	118,900	1:19,817
3 (Pincher Creek)	3	38,800	1:12,933
4 (Hanna)	2	12,900	1: 6,450
5 (Drumheller)	4	41,300	1:10,325
6 (Calgary)[3]	2	71,457	1:35,729
7 (Stettler)	4	42,900	1:10,725
8 (Red Deer)	9	136,100	1:15,122
9 (Banff)	2	23,700	1:11,850
10 (Camrose)	14	82,300	1: 5,879
11 (Edmonton)[4]	5	119,884	1:23,977
12 (Fort McMurray)	9	93,900	1:10,433
13 (Whitecourt)	4	56,900	1:14,225
14 (Hinton)	1	27,200	1:27,200
15 (Grande Prairie)	13	139,200	1:10,708
Census Metropolitan Area of Calgary	32	625,143[5]	1:19,536
Census Metropolitan Area of Edmonton	30	683,016[5]	1:22,767
PROVINCIAL TOTAL	142	2,372,000	1:16,704

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	144[1]	162[2]	142[3]
% Change in Number of Practicing Personnel	4.3%	12.5%	-12.3%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratio:			
- Alberta	1:16,365	1:14,583	1:16,704
- Canada[6]	1:10,009	-	-

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau Statistics, October 1984.

[6] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology offers a two-year health records administrator diploma program. The program produced 10 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	14	8	16
2nd Year	14	14	10
Graduates:	12	14	10

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Alberta Health Record Association sponsored a number of continuing education and teleconference programs for its members in 1985. The Alberta Hospital Association, along with other hospital organizations, also offered various continuing education programs.

HEALTH RECORD TECHNICIANS

I. OVERVIEW

Definition: Assist Health Record Administrators, carry out many technical activities within the medical record department, typing medical information, preparing statistical reports, reviewing medical records, supervising clerical personnel, working with doctors, nurses and other health professionals on medical research projects.

(Source: **Health Manpower Provincial Report, Manitoba, 1982**. Winnipeg, Manitoba: Manitoba Department of Health, 1982)

Since registration with the Alberta Health Record Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 303 health record technicians practicing in Alberta in 1985.[1] Almost half of the health record technicians were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial health record technician-to-population ratio was 1:7,828 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Mrs. Pat Tallman

c) Legislation:

There is no legislation regulating health record technicians in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF HEALTH RECORD TECHNICIANS AND PERSONNEL-TO POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	58,400	1:19,467
2 (Lethbridge)	11	118,900	1:10,809
3 (Pincher Creek)	11	38,800	1: 3,527
4 (Hanna)	3	12,900	1: 4,300
5 (Drumheller)	7	41,300	1: 5,900
6 (Calgary)[3]	7	77,457	1:10,208
7 (Stettler)	10	42,900	1: 4,290
8 (Red Deer)	23	136,100	1: 5,917
9 (Banff)	6	23,700	1: 3,950
10 (Camrose)	16	82,300	1: 5,144
11 (Edmonton)[4]	8	119,884	1:14,986
12 (Fort McMurray)	24	93,900	1: 3,913
13 (Whitecourt)	10	56,900	1: 5,690
14 (Hinton)	3	27,200	1: 9,067
15 (Grande Prairie)	15	139,200	1: 9,280
Census Metropolitan Area of Calgary	71	625,143[5]	1: 8,805
Census Metropolitan Area of Edmonton	75	683,016[5]	1: 9,107
PROVINCIAL TOTAL	303	2,372,000	1: 7,828

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD TECHNICIANS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	319[1]	270[2]	303[3]
% Change in Number of Practicing Personnel	15.2%	-15.4%	12.2%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratio: - Alberta	1: 7,387	1: 8,750	1: 7,828

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections, Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Southern Alberta Institute of Technology (S.A.I.T.) offers a 12-month health record technician certificate program. The program produced 11 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD TECHNICIANS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Southern Alberta Institute of Technology (Program Length: 12 months)			
Enrolments:	22	25	19
Graduates:	16	16	11

[1] Source: **1984-85 Alberta Health and Social Service Training Program Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Alberta Health Record Association sponsored a number of continuing education and teleconference programs for its members in 1985. The Alberta Hospital Association, along with other hospital organizations, also offered various continuing education programs.

MEDICAL LABORATORY TECHNOLOGISTS

I. OVERVIEW

Definition: Perform medical laboratory tests, procedures, experiments and analyses for the diagnosis, treatment and prevention of disease. Conduct chemical analysis of blood, urine, cerebro-spinal and other body fluids to ascertain normal and abnormal constituents. Study blood cells, their numbers, morphological characteristics and coagulation factors related to various physiological and pathological conditions. Prepare tissue sections for microscopic examination using fixation, imbedding, cutting and staining techniques to demonstrate special cellular tissue elements or other characteristics. Study micro-organisms which cause disease and their effect upon the human body, using a variety of microscopic and macroscopic techniques. Perform blood group, type and compatability tests for transfusion purposes. Investigate responses of body to foreign cells or agents.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Canadian Society of Laboratory Technologists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 2,135 medical laboratory technologists practicing in Alberta in 1985.[1] Over three-quarters of the medical laboratory technologists were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial medical laboratory technologist-to-population ratio was 1:1,111 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

Some of the basic laboratory services provided by medical laboratory technologists are also provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Society of Medical Laboratory Technologists
Box 4165
Edmonton, Alberta
T6E 4T2

President: Ms. Marie Ellement

c) Legislation:

There is no legislation regulating medical laboratory technologists in Alberta at present.

III. PERSONNEL DATA

TABLE 1A NUMBER OF MEDICAL LABORATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	39	58,400	1: 1,497
2 (Lethbridge)	94	118,900	1: 1,265
3 (Pincher Creek)	15	38,800	1: 2,587
4 (Hanna)	1	12,900	1:12,900
5 (Drumheller)	14	41,300	1: 2,950
6 (Calgary)[3]	25	71,457	1: 2,858
7 (Stettler)	19	42,900	1: 2,258
8 (Red Deer)	99	136,100	1: 1,375
9 (Banff)	11	23,700	1: 2,155
10 (Camrose)	35	82,300	1: 2,351
11 (Edmonton)[4]	25	119,884	1: 4,795
12 (Fort McMurray)	53	93,900	1: 1,772
13 (Whitecourt)	16	56,900	1: 3,556
14 (Hinton)	8	27,200	1: 3,400
15 (Grande Prairie)	56	139,200	1: 2,486
Census Metropolitan Area of Calgary	714	625,143[5]	1: 876
Census Metropolitan Area of Edmonton	911	683,016[5]	1: 750
PROVINCIAL TOTAL	2,135	2,372,000	1: 1,111

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF MEDICAL LABORATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	714	625,143	1: 876
Census Metropolitan Area of Edmonton	911	683,016	1: 750
Between 10,000 and 60,000			
Airdrie	3	10,431	1: 3,477
Camrose	10	12,751	1: 1,275
Fort McMurray	33	36,810	1: 1,115
Grande Prairie	27	25,056	1: 928
Leduc	6	12,926	1: 2,154
Lethbridge	79	59,901	1: 758
Lloydminster	8	10,557	1: 1,320
Medicine Hat	37	41,717	1: 1,127
Red Deer	86	52,620	1: 612
Spruce Grove	3	11,569	1: 3,856
Wetaskiwin	9	10,022	1: 1,114
Between 5,000 and 10,000			
Bonnyville	3	5,223	1: 1,741
Brooks	7	9,421	1: 1,346
Crownest Pass	4	7,577	1: 1,894
Drumheller	9	6,671	1: 741
Edson	3	7,110	1: 2,370
High River	9	5,114	1: 568
Hinton	5	8,904	1: 1,781
Innisfail	1	5,435	1: 5,435
Lacombe	2	5,954	1: 2,977
Peace River	7	6,043	1: 863
Ponoka	3	5,221	1: 1,740
Rocky Mountain House	3	5,126	1: 1,709
St. Paul	4	5,052	1: 1,263
Stettler	5	5,136	1: 1,027
Stony Plain	4	5,291	1: 1,323
Taber	5	6,384	1: 1,277
Vegreville	4	5,251	1: 1,313
Whitecourt	4	5,408	1: 1,352
Under 5,000	127	669,160	1: 5,269
TOTAL	2,135	2,372,000	1: 1,111

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	1,928[1]	1,957[2]	2,135[3]
% Change in Number of Practicing Personnel	3.5%	1.5%	9.1%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1:1,222	1:1,207	1:1,111
- Western Canada[6]	-	1:1,130	-
- Canada[7]	1:1,353	-	-

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Sources: (i) **Rollcall 83**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning Directorate, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report 1982-1984**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee. The figure for British Columbia refers to personnel who were registered (registration is not mandatory) and practicing. The Alberta figure refers to practicing personnel, while the figures for Manitoba and Saskatchewan refer to personnel registered with their respective provincial professional associations.

[7] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer a two-year medical laboratory technology diploma program. The two programs together produced 94 graduates in 1984-85. In addition, the University of Alberta offers a four-year bachelor of science program in medical laboratory science. The program produced 15 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAMS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
A. DIPLOMA PROGRAMS			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	76	73	75
2nd Year	62	67	64
Graduates:	62	64	63
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	47	45	46
2nd Year	36	32	34
Graduates:	31	32	31
PROVINCIAL TOTAL			
Number of Diploma Programs: 2			
Graduates:	93	98	94

B. BACCALAUREATE PROGRAM

University of Alberta
(Program Length: 4 years)

Enrolments:			
1st Year	35	35	36
2nd Year	25	26	27
3rd Year	17	20	22
4th Year	18	14	15
Graduates:	18	14	15

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Alberta Society of Medical Laboratory Technology offered a number updating courses for members, through the Southern Alberta Institute of Technology. Other educational institutions such as the British Columbia Institute of Technology, the University of Alberta, and the Colorado Association for Continuing Medical Laboratory Education Incorporated also offered courses dealing with the area of medical laboratory technology.

MEDICAL RADIATION TECHNOLOGISTS

I. OVERVIEW

Definition: Radiographic Technologists

Operate radiography equipment to produce pictures of body structures for diagnostic purposes. Explain treatment and reassure patients. Prepare drugs and chemicals for radiologist. Position patient according to part of body being x-rayed. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam, to regulate length and intensity of x-ray exposure and to expose film. Process and prepare films for interpretation by radiologist. Assist radiologist in fluoroscopy, cinefluoroscopy and other diagnostic procedures. Operate radiography equipment in operating theater or other specialized area to assist physician or surgeon.

Radiation Oncology Technologists

Administer radiation treatment to patients as prescribed by radiation oncologist. Explain treatment and reassure patients. Position patient according to part of body being treated. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam. Observe patient through window or on closed circuit television during treatment. Notify radiation onologist if medical problems arise. Assist clinical physicist to prepare patient's treatment plan according to radiation oncologist's prescription. Process or assist in preparation of sealed radioactive substances for surface application or insertion into body cavities.

Nuclear Medicine Technologists

Prepare radioactive solutions and reagents and operates scanning equipment for diagnostic purposes. Perform assays and quality-control tests on radioactive materials. Calculate doses to be administered by physician. Position patient and calibrate scanning equipment. Operate radiation-scanning equipment to produce photographic image of irradiated area. Calculate blood volume and red-cell survival, using geiger counter, electroscope, scaler, scintillation and position scanner and scintogram. Monitor

> oscilloscope images and study photographic images to determine if further scanning is required. Perform radioisotope scanning of pathological specimens and blood samples.
>
> (Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Medical Radiation Technologists (A.A.M.R.T.) is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 926 medical radiation technologists practicing in Alberta in 1985.[1] Of the 926 medical radiation technologists, 817 were radiographic technologists, 50 were radiation oncology technologists, and 59 were nuclear medicine technologists. About three-quarters of all medical radiation technologists were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial medical radiation technologist-to-population ratio was 1:2,562 in 1985.

Some of the basic x-ray services performed by medical radiation technologists are also provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Health Disciplines Board
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Alberta Association of Medical Radiation Technologists
Room 202A, 2204 - 5th Avenue North
Lethbridge, Alberta
T1H 0N7

President: Mrs. Deanna Siewert

c) Legislation:

The designation of the discipline of medical radiation technologists under the **Health Disciplines Act** received royal assent in June 1983. A Medical Radiation Technologists Committee was established by the Minister Responsible for Professions and Occupations in January 1984 to prepare draft regulations for this discipline.

In October 1985 regulations governing the discipline of medical radiation technologist were approved under the **Health Disciplines Act**. These regulations will come into effect in 1986.

III. PERSONNEL DATA

TABLE 1A NUMBER OF MEDICAL RADIATION TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	12	58,400	1: 4,867
2 (Lethbridge)	38	118,900	1: 3,129
3 (Pincher Creek)	10	38,800	1: 3,880
4 (Hanna)	1	12,900	1: 12,900
5 (Drumheller)	6	41,300	1: 6,883
6 (Calgary)[3]	11	71,457	1: 6,496
7 (Stettler)	9	42,900	1: 4,767
8 (Red Deer)	35	136,100	1: 3,889
9 (Banff)	5	23,700	1: 4,740
10 (Camrose)	20	82,300	1: 4,115
11 (Edmonton)[4]	17	119,884	1: 7,052
12 (Fort McMurray)	20	93,900	1: 4,695
13 (Whitecourt)	12	56,900	1: 4,742
14 (Hinton)	4	27,200	1: 6,800
15 (Grande Prairie)	32	139,200	1: 4,350
Census Metropolitan Area of Calgary	284	625,143[5]	1: 2,201
Census Metropolitan Area of Edmonton	410	683,016[5]	1: 1,666
PROVINCIAL TOTAL	926	2,372,000	1: 2,562

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Divisions Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF MEDICAL RADIATION TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	284	625,143	1: 2,201
Census Metropolitan Area of Edmonton	410	683,016	1: 1,666
Between 10,000 and 60,000			
Airdrie	0	10,431	-
Camrose	4	12,751	1: 3,188
Fort McMurray	9	36,810	1: 4,090
Grande Prairie	13	25,056	1: 1,927
Leduc	3	12,926	1: 4,309
Lethbridge	27	59,901	1: 2,219
Lloydminster	4	10,557	1: 3,467
Medicine Hat	12	41,717	1: 2,639
Red Deer	24	52,620	1: 2,193
Spruce Grove	2	11,569	1: 5,785
Wetaskiwin	4	10,022	1: 2,506
Between 5,000 and 10,000			
Bonnyville	1	5,223	1: 5,223
Brooks	4	9,421	1: 2,355
Crownest Pass	2	7,577	1: 3,789
Drumheller	3	6,671	1: 2,224
Edson	1	7,110	1: 7,110
High River	5	5,114	1: 1,023
Hinton	3	8,904	1: 2,968
Innisfail	1	5,435	1: 5,435
Lacombe	3	5,954	1: 1,985
Peace River	3	6,043	1: 2,014
Ponoka	3	5,221	1: 1,740
Rocky Mountain House	1	5,126	1: 5,126
St. Paul	4	5,052	1: 1,263
Stettler	3	5,136	1: 1,712
Stony Plain	6	5,291	1: 882
Taber	7	6,384	1: 912
Vegreville	2	5,251	1: 2,626
Whitecourt	5	5,408	1: 1,082
Under 5,000	73	669,160	1: 9,167
TOTAL	926	2,372,000	1: 2,562

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	871[1]	840[2]	926[3]
% Change in Number Practicing Personnel	18.7%	-3.6%	10.2%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 2,706	1: 2,812	1: 2,562
- Canada[6]	1: 2,613	-	

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[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A person who wishes to become a medical radiation technologist can obtain training in one of three areas: radiography, radiation oncology, and nuclear medicine. Seven training hospitals in Calgary, Edmonton, and Red Deer, in conjunction with the Northern Alberta Institute of Technology, offer a two-year medical x-ray technology diploma program. There were 55 graduates in 1984-85.

Both the Cross Cancer Institute in Edmonton and the Tom Baker Cancer Centre in Calgary offer a 27-month training program in radiation oncology technology. The programs produced six graduates in 1984-85. The two programs were formerly known as therapeutic radiology programs. The program in Edmonton is now identified as radiation oncology, and the one in Calgary as radiation therapy.

Training programs in nuclear medicine technology, which are two years in length, are offered by the University of Alberta Hospitals in Edmonton and the Foothills Hospital in Calgary in conjunction with the Southern Alberta Institute of Technology. The program produced nine graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAMS FOR MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
A. PROGRAM IN MEDICAL X-RAY TECHNOLOGY			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	59	59	60
2nd Year	56	56	56
Graduates:	55	50	55

TABLE 3 (cont'd)

		1982-83	1983-84	1984-85
B.	PROGRAMS IN RADIATION ONCOLOGY			
	Cross Cancer Institute (Program Length: 27 months)			
	Enrolments:			
	1st Year	3	6	3
	2nd Year	4	3	1
	Graduates:	3	3	3
	Tom Baker Cancer Centre (Program Length: 27 months)			
	Enrolments:			
	1st Year	4	4	3
	2nd Year	2	4	4
	Graduates:	2	2	3
	PROVINCIAL TOTAL			
	Number of Programs in Radiation Oncology: 2			
	Graduates:	5	5	6
C.	PROGRAM IN NUCLEAR MEDICINE			
	Southern Alberta Institute of Technology (Program Length: 2 years)			
	Enrolments:			
	1st Year	16	16	16
	2nd Year	10	9	13
	Graduates:	8	9	9

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Alberta Association of Medical Radiation Technologists offered a number of continuing education seminars and courses. Courses and seminars were also held in conjunction with its annual conference.

In addition, the Canadian Association of Medical Radiation Technologists offered a series of continuing education courses in conjunction with its annual conference.

OCCUPATIONAL HYGIENE TECHNOLOGISTS

I. OVERVIEW

Definition: Under the supervision of an occupational hygienist, studies, evaluates and conducts a health program to control those environmental factors or stresses arising in a work situation which may cause sickness, injury or significant discomfort and inefficiency among workers. Collects, measures and analyzes samples of dust, gases, vapors and other potentially-toxic materials to determine adherence to prescribed standards. Investigates adequacy of ventilation, exhaust equipment, lighting and other conditions which may affect employee health. Performs sound- level evaluations to determine relationship of noise to employee discomfort and efficiency. Collaborates with other scientists and engineers to institute control and correction of hazards. Participates in education meetings to instruct employees in matters pertaining to occupational health.

(Source: Department of Community and Occupational Health, Government of Alberta)

Since registration with the Alberta section of the American Industrial Hygiene Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 88 occupational hygiene technologists practicing in Alberta in 1985.[1] About 72 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The Provincial occupational hygiene technologist-to-population ratio was 1:26,955 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Industrial Hygiene Association
(Alberta Section)
P.O. Box 130
Calgary, Alberta
T2P 2H7

President: Mr. H. Evans

c) Legislation:

There is no legislation regulating occupational hygiene technologists in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF OCCUPATIONAL HYGIENE TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	58,400	1: 8,343
2 (Lethbridge)	3	118,900	1: 39,633
3 (Pincher Creek)	0	38,800	1: -
4 (Hanna)	0	12,900	-
5 (Drumheller)	0	41,300	1: -
6 (Calgary)[3]	0	71,457	1: -
7 (Stettler)	0	42,900	1: -
8 (Red Deer)	5	136,100	1: 27,220
9 (Banff)	0	23,700	1: -
10 (Camrose)	0	82,300	1: -
11 (Edmonton)[4]	1	119,884	1:119,884
12 (Fort McMurray)	2	93,900	1: 46,950
13 (Whitecourt)	0	56,900	1: -
14 (Hinton)	3	27,200	1: 9,067
15 (Grande Prairie)	4	139,200	1: 34,800
Census Metropolitan Area of Calgary	26	625,143[5]	1: 24,044
Census Metropolitan Area of Edmonton	37	683,016[5]	1: 18,460
PROVINCIAL TOTAL	88	2,372,000	1: 26,955

---

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA, 1983, 1984 AND 1985

	1983	1984	1985
Number of Practicing Personnel	63[1]	67[2]	88[3]
% Change in Number of Practicing Personnel	36.9%	6.3%	31.3%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1:37,405	1:35,260	1:26,955

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services as Disciplines Committee, March 1984.

[2] Source: "September 30, 1984 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: "Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Mount Royal College introduced an occupational hygiene diploma for occupational hygiene technologists in 1984-85. There were 12 students enrolled in the first year of the program. As this is a two-year program, there were no graduates in 1984-85.

TABLE 2 BASIC EDUCATION PROGRAM FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Mount Royal Community College (Program Length: 2 years)			
Enrolments:	-	-	12
Graduates:	-	-	-

[1] Source: **Alberta Health and Social Services Training Program Inventory, 1984-85.** Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

Various seminars in the field of occupational hygiene are offered by the Alberta section of the American Industrial Hygiene Association. As well, other continuing education programs are offered by the American Conference of Governmental Industrial Hygienists and the American Board of Industrial Hygiene.

OCCUPATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan and carry out treatment programs based on activities such as work, education and recreation to rehabilitate physically and mentally disabled persons. Administer test and observe patients to assess their emotional, mental and physical capacities. Plan and direct programs in manual and creative arts, industrial and vocational skills, recreational activities, remedial games, cultural and educational interests and play activities for children. Conduct group programs to assist patients in building self-confidence and in adjusting to family and community. Train handicapped patients in self-care and daily living activities. Advise and instruct patients on specially-adapted household equipment and furnishings. Assess patient's vocational potential and provide work adjustment and actual work experience. Participate in testing and training of patients with perceptual motor problems and provide training for children with learning disabilities. Record patient's activities, response and progress. Attend meetings of rehabilitation team and seminars, workshops and courses on occupational therapy. Supervise and instruct occupational therapy students and auxiliary personnel assigned to department.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Registered Occupational Therapists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 296 occupational therapists practicing in Alberta in 1985.[1] About 81 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial occupational therapist-to-population ratio was 1:8,014 in 1985. Since the March 31, 1984 survey did not count all occupational therapists, data from the 1984 survey and the 1985 survey are not comparable. The last comprehensive survey was conducted on September 30, 1983.[2] According to this survey there were 315 occupational therapists practicing in Alberta in 1983.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Registered
Occupational Therapists
300, 5241 - Calgary Trail Southbound N.W.
Edmonton, Alberta
T6H 5G8

President: Ms. Geraldine Watson

c) Legislation:

There is no legislation regulating occupational therapists in Alberta at present.

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[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

III. PERSONNEL DATA

TABLE 1 NUMBER OF OCCUPATIONAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	58,400	1: 9,733
2 (Lethbridge)	6	118,900	1:19,817
3 (Pincher Creek)	2	38,800	1:19,400
4 (Hanna)	0	12,900	-
5 (Drumheller)	1	41,300	1:41,300
6 (Calgary)[3]	3	71,457	1:23,819
7 (Stettler)	1	42,900	1:42,900
8 (Red Deer)	13	136,100	1:10,469
9 (Banff)	1	23,700	1:23,700
10 (Camrose)	2	82,300	1:41,150
11 (Edmonton)[4]	9	119,884	1:13,320
12 (Fort McMurray)	1	93,900	1:93,900
13 (Whitecourt)	3	56,900	1:18,967
14 (Hinton)	0	27,200	-
15 (Grande Prairie)	9	139,200	1:15,467
Census Metropolitan Area of Calgary	102	625,143[5]	1: 6,129
Census Metropolitan Area of Edmonton	137	683,016[5]	1: 4,986
PROVINCIAL TOTAL	296	2,372,000	1: 8,014

---

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL THERAPISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	315[1]	266[2]	296[3]
% Change in Number of Practicing Personnel	9.4%	N/A	N/A
Population (Alberta)[4]	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 7,481	1: 8,881	1: 8,014
- Western Canada[6]	1: 8,672	-	1: 7,933
- Canada[7]	1:11,671	-	-

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The discrepancy between the 1983 and 1984 figures is mainly due to the fact that the 1984 survey is not a comprehensive survey. Therefore, not all practicing occupational therapists in the province were counted in 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Sources: (i) **Rollcall 85**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

[7] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A four-year bachelor of science program in occupational therapy is offered at the University of Alberta. The program produced 39 graduates in 1984-85.

Under an interprovincial training agreement, five training places per year are reserved for Saskatchewan students in the occupational therapy program at the University of Alberta.

TABLE 3 BASIC EDUCATION PROGRAM FOR OCCUPATIONAL THERAPISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	Pre-Professional Yr	Pre-Professional Yr	Pre-Professional Yr
2nd Year	41	41	40
3rd Year	38	37	44
4th Year	44	49	51
Graduates:	40	42	39

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[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Alberta Association of Registered Occupational Therapists offered a number of courses for its members, and sponsored various workshops related to occupational therapy.

OPHTHALMIC DISPENSERS

I. OVERVIEW

Definition: An ophthalmic dispenser supplies, prepares, or dispenses ophthalmic appliances; interprets prescriptions from ophthalmologists or optometrists in respect of ophthalmic appliances; fits, adjusts and adapts ophthalmic appliances to the needs of the intended wearer in accordance with a prescription from an ophthamologist or optometrist, or without a prescription where lenses are duplicated with no change in their refractive value.

(Source: **The Ophthalmic Dispensers Act,** RSA 1980)

There were 321 ophthalmic dispensers who were residing in Alberta and registered with the Alberta Guild of Ophthalmic Dispensers in 1985.[1] Three-quarters of the ophthalmic dispensers were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of ophthalmic dispensers registered in Alberta grew by 15.9 percent between 1983 and 1985, while the provincial population increased by 0.7 percent during the same period. The provincial ophthalmic dispenser-to-population ratio was 1:7,389 in 1985.

Most of the services provided by ophthalmic dispensers are also provided by optometrists (see chapter on Optometrists).

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of September 9, 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Ophthalmic Dispensers Examining Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Alberta Guild of Ophthalmic Dispensers
Room 306, Guardian Building
10240 - 124 Street
Edmonton, Alberta
T5N 3W6

President: Mr. Gordon Bishop

c) Legislation:

Under the authority of the **Ophthalmic Dispensers Act**, all individuals who wish to practice as ophthalmic dispensers must apply for and receive a certificate of competency from the Ophthalmic Dispensers Examining Board, a provincial government certification body. Successful applicants must register with the Alberta Guild of Ophthalmic Dispensers. Annual re-registration is required in order for ophthalmic dispensers to continue to practice in Alberta. The Ophthalmic Dispensers Examining Board also issues special certificates to practitioners who dispense contact lenses.

The Alberta Guild of Ophthalmic Dispensers is responsible for regulating the conduct of its members and for maintaining professional discipline, but the Ophthalmic Dispensers Examining Board is also empowered to review matters of competency. The Board sets the educational qualifications required for obtaining a certificate of competency or a special certificate of competency in dispensing contact lenses and for registration with the Guild. Individuals wishing to become members of the Guild are required to pass the examinations set by the Board.

III. PERSONNEL DATA

TABLE 1

NUMBER OF OPHTHALMIC DISPENSERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	58,400	1: 6,489
2 (Lethbridge)	19	118,900	1: 6,258
3 (Pincher Creek)	0	38,800	-
4 (Hanna)	0	12,900	-
5 (Drumheller)	2	41,300	1:20,650
6 (Calgary)[3]	2	71,457	1:35,729
7 (Stettler)	2	42,900	1:21,500
8 (Red Deer)	17	136,100	1: 8,006
9 (Banff)	0	23,700	-
10 (Camrose)	4	82,300	1:20,575
11 (Edmonton)[4]	8	119,884	1:14,986
12 (Fort McMurray)	5	93,900	1:18,780
13 (Whitecourt)	1	56,900	1:56,900
14 (Hinton)	1	27,200	1:27,200
15 (Grande Prairie)	9	139,200	1:15,467
Census Metropolitan Area of Calgary	100	625,143[5]	1: 6,251
Census Metropolitan Area of Edmonton	142	683,016[5]	1: 4,810
PROVINCIAL TOTAL	321	2,372,000	1: 7,389

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of September 9, 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPHTHALMIC DISPENSERS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	277	292	321
% Change in Number of Registered Personnel	3.4%	5.1%	9.9%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 8,507	1: 8,090	1: 7,389
- Canada[4]	1: 8,116	-	-

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics October, 1984.

[4] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for ophthalmic dispensers in Alberta. Most ophthalmic dispensers are trained on-the-job and through correspondence courses offered by the Canadian Guild of Ophthalmic Dispensers.

Beginning in 1980, an individual must have completed the Canadian Guild of Ophthalmic Dispensers correspondence course and have had three years of experience working in an optical laboratory or optical dispensary before taking the examinations of the Ophthalmic Dispensers Examining Board. Previously, individuals with five years of experience were eligible to take these examinations without completing the correspondence course.

b) **Continuing Education Programs:**

A number of lectures relevant to ophthalmic dispensing were offered to members at the annual convention of the Alberta Guild of Ophthalmic Dispensers in 1985.

OPTOMETRISTS

I. OVERVIEW

Definition: A person engaged in the practice of optometry.

"Practice of optometry" means:

(i) the examination of the human eye, and to determine the presence of vision problems,

(ii) the prescribing and adapting of lenses, frames, mountings, contact lenses or other aids and the utilization of vision training, to preserve, restore and enhance vision efficiency;

(Source: **Optometry Act**, RSA 1980)

There were 210 optometrists who were residing in Alberta and registered with the Alberta Association of Optometrists (A.A.O.) in 1985.[1] About 62 percent of the optometrists were located in the Census Metropolitan Areas of Calgary and Edmonton. Some optometrists in the larger urban centers operate satellite offices in neighboring rural areas and smaller centers throughout the province. Some of the services provided by optometrists, such as the dispensing of ophthalmic appliances, can also be provided by ophthalmic dispensers (see chapter on Ophthalmic Dispensers).

The number of optometrists registered in Alberta increased by 6.6 per cent between 1983 and 1985, while the provincial population increased by 0.7 percent during the same period. The provincial optometrist-to-population ratio was 1: 11,295 in 1985.

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31, 1985. Excludes honorary, inactive, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Board of Examiners in Optometry
c/o Professions and Occupations Bureau
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

and

Alberta Association of Optometrists
No. 2, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

b) Professional Association:

Alberta Association of Optometrists
No. 2, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

President: Dr. Gordon Hensel

c) Legislation:

Under the authority of the **Optometry Act**, all individuals who wish to practice as optometrists must apply for and receive a Certificate of Approval for Registration from the Board of Examiners in Optometry, a provincial government certification body. Successful applicants must register with the Alberta Association of Optometrists (A.A.O.). Annual re-registration is required of all optometrists who wish to continue to practice in Alberta.

The A.A.O. is responsible for regulating the conduct of its members and for maintaining professional discipline. The Board of Examiners in Optometry sets the educational qualifications and conducts both written and oral examinations to determine eligibility for registration with the Alberta Association of Optometrists.

III. PERSONNEL DATA

TABLE 1A NUMBER OF OPTOMETRISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	58,400	1: 11,680
2 (Lethbridge)	14	118,900	1: 8,493
3 (Pincher Creek)	1	38,800	1: 38,800
4 (Hanna)	1	12,900	1: 12,900
5 (Drumheller)	0	41,300	-
6 (Calgary)[3]	5	71,457	1: 14,291
7 (Stettler)	2	42,900	1: 21,450
8 (Red Deer)	19	136,100	1: 7,163
9 (Banff)	0	23,700	-
10 (Camrose)	6	82,300	1: 13,717
11 (Edmonton)[4]	6	119,884	1: 19,981
12 (Fort McMurray)	7	93,900	1: 13,414
13 (Whitecourt)	5	56,900	1: 11,380
14 (Hinton)	1	27,200	1: 27,200
15 (Grande Prairie)	8	139,200	1: 17,400
Census Metropolitan Area of Calgary	61	625,143[5]	1: 10,248
Census Metropolitan Area of Edmonton	69	683,016[5]	1: 9,899
PROVINCIAL TOTAL	210	2,372,000	1: 11,295

[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31, 1985. Excludes honorary, inactive, and retired members.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF OPTOMETRISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	61	625,143	1: 10,248
Census Metropolitan Area of Edmonton	69	683,016	1: 9,899
Between 10,000 and 60,000			
Airdrie	2	10,431	1: 5,216
Camrose	3	12,751	1: 4,250
Fort McMurray	2	36,810	1: 18,405
Grande Prairie	5	25,056	1: 5,011
Leduc	2	12,926	1: 6,463
Lethbridge	12	59,901	1: 4,992
Lloydminster	2	10,557	1: 5,279
Medicine Hat	5	41,717	1: 8,343
Red Deer	13	52,620	1: 4,048
Spruce Grove	1	11,569	1: 11,569
Wetaskiwin	2	10,022	1: 5,011
Between 5,000 and 10,000			
Bonnyville	1	5,223	1: 5,223
Brooks	0	9,421	-
Crowsnest Pass	0	7,577	-
Drumheller	0	6,671	-
Edson	0	7,110	-
High River	2	5,114	1: 2,557
Hinton	1	8,904	1: 8,904
Innisfail	1	5,435	1: 5,435
Lacombe	1	5,954	1: 5,954
Peace River	1	6,043	1: 6,043
Ponoka	3	5,221	1: 1,740
Rocky Mountain House	1	5,126	1: 5,126
St. Paul	2	5,052	1: 2,526
Stettler	1	5,136	1: 5,136
Stony Plain	0	5,291	-
Taber	1	6,384	1: 6,384
Vegreville	1	5,251	1: 5,251
Whitecourt	2	5,408	1: 2,704
Under 5,000	13	664,160	1: 51,089
TOTAL	210	2,372,000	1: 11,295

---

[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31, 1985. Excludes honorary, inactive, and retired members.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, Edmonton, Alberta, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPTOMETRISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	197	187	210
% Change in Number of Registered Personnel	3.1%	-5.1%	12.3%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 11,962	1: 12,633	1: 11,295
- Western Canada[4]	1: 12,771	-	1: 12,297
- Canada[5]	1: 10,391	-	-

[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta. Excludes honorary, inactive, and retired members.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Sources: (i) **Rollcall 85**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to optometrists registered with their respective provincial professional associations.

[5] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is no training program for optometrists in Alberta. However, Alberta, Saskatchewan, and Manitoba have had an inter-provincial training agreement with the School of Optometry at the University of Waterloo and the Government of Ontario since 1976. Under this agreement, the three Western provinces annually purchase 13 training places (seven places for Alberta; three places for Saskatchewan; and three places for Manitoba) in the four-year program at the University of Waterloo.

In September 1981 the agreement with the University of Waterloo and the Government of Ontario was renewed for a further five-year period. Pre-requisite for admission into the School of Optometry is two years of pre-optometry training (or equivalent courses in the sciences, including physics, mathematics, biology, zoology, chemistry, and psychology). In 1985 Alberta had a total of 29 students enrolled in the four year training program at the University of Waterloo under the current agreement.

In addition to the University of Waterloo, a program in optometry is offered in French at the University of Montreal. The Western provinces have no inter-provincial training agreements with the University of Montreal.

b) Continuing Education Programs:

Four educational seminars were sponsored by the Alberta Association of Optometrists. Each of these seminars was of the nature and length to enable those who attended to obtain the 12 hours of continuing education credit required of each member each year. Workshops were also provided by other agencies and organizations.

PHARMACISTS

I. OVERVIEW

Definition: Compound and dispense prescribed pharmaceuticals and related preparations. Prepare or supervise preparation of liquid medicines, ointments, powders, pills and other medications. Check prescriptions for overdoses and drug interactions. Weigh, measure and mix drugs and other medicinal compounds and fill bottles and capsules with correct quantity and composition of preparation. Store and preserve biologicals, vaccines, serums and other drugs to prevent deterioration. Dispense medical and surgical products for internal and external use as prescribed. Maintain patient medication profiles and record prescriptions dispensed and poisons and narcotics issued. Order and maintain stock of pharmaceutical supplies. Provide information on uses and effects of medicaments. Sell non-prescription drugs, sick-room supplies, toiletries, cosmetics, lotions and other commercial products.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,881 pharmacists who were residing in Alberta and registered with the Alberta Pharmaceutical Association (A.P.A.) in 1985.[1] About 62 percent of the pharmacists were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of pharmacists registered in Alberta grew by 3.6 percent between 1983 and 1985 while the provincial population increased by 0.7 percent during the same period. The provincial pharmacist-to-population ratio was 1: 1,261 in 1985.

---

[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1985. Excludes inactive, honorary, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

b) Professional Association:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

President: Mr. Don Vickerson

c) Legislation:

Under the authority of the **Pharmaceutical Association Act**, all individuals who wish to practice as pharmacists must register with the Alberta Pharmaceutical Association (A.P.A.). Annual re-registration with the Association is required of all pharmacists who wish to continue to practice in Alberta.

The Alberta Pharmaceutical Association is also responsible for regulating the conduct of its members and for maintaining discipline. The **Pharmaceutical Association Act** sets the educational qualifications required for registration with the A.P.A.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PHARMACISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	45	58,400	1: 1,298
2 (Lethbridge)	86	118,900	1: 1,383
3 (Pincher Creek)	22	38,800	1: 1,764
4 (Hanna)	8	12,900	1: 1,613
5 (Drumheller)	30	41,300	1: 1,377
6 (Calgary)[3]	47	71,457	1: 1,520
7 (Stettler)	27	42,900	1: 1,589
8 (Red Deer)	104	136,100	1: 1,309
9 (Banff)	27	23,700	1: 878
10 (Camrose)	67	82,300	1: 1,228
11 (Edmonton)[4]	85	119,884	1: 1,410
12 (Fort McMurray)	54	93,900	1: 1,739
13 (Whitecourt)	24	56,900	1: 2,371
14 (Hinton)	13	27,200	1: 2,092
15 (Grande Prairie)	67	139,200	1: 2,078
Census Metropolitan Area of Calgary	492	625,143[5]	1: 1,271
Census Metropolitan Area of Edmonton	683	683,016[5]	1: 1,000
PROVINCIAL TOTAL	1,881	2,372,000	1: 1,261

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1985. Excludes inactive, honorary, and retired members.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF PHARMACISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	492	625,143	1: 1,271
Census Metropolitan Area of Edmonton	683	683,016	1: 1,000
Between 10,000 and 60,000			
Airdrie	5	10,431	1: 2,086
Camrose	16	12,751	1: 797
Fort McMurray	19	36,810	1: 1,937
Grande Prairie	27	25,056	1: 928
Leduc	16	12,926	1: 808
Lethbridge	56	59,901	1: 1,070
Lloydminster	8	10,557	1: 1,320
Medicine Hat	38	41,717	1: 1,098
Red Deer	52	52,620	1: 1,012
Spruce Grove	9	11,569	1: 1,285
Wetaskiwin	18	10,022	1: 557
Between 5,000 and 10,000			
Bonnyville	8	5,223	1: 653
Brooks	9	9,421	1: 1,047
Crowsnest Pass	0	7,577	-
Drumheller	12	6,671	1: 556
Edson	4	7,110	1: 1,778
High River	7	5,114	1: 731
Hinton	7	8,904	1: 1,272
Innisfail	12	5,435	1: 453
Lacombe	10	5,954	1: 595
Peace River	9	6,043	1: 671
Ponoka	11	5,221	1: 475
Rocky Mountain House	5	5,126	1: 1,025
St. Paul	9	5,052	1: 560
Stettler	7	5,136	1: 734
Stony Plain	8	5,291	1: 661
Taber	8	6,384	1: 798
Vegreville	9	5,251	1: 583
Whitecourt	3	5,408	1: 1,803
Under 5,000	304	669,160	1: 2,201
TOTAL	1,881	2,372,000	1: 1,261

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with A.P.A. and residing in Alberta as of December 31, 1985. Excludes inactive, honorary, and retired members.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number Registered[1]	1,816	1,872	1,881
% Change in Number Registered	2.9%	3.1%	0.5%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 1,298	1: 1,262	1: 1,261
- Western Canada[4]	-	-	1: 1,295
- Canada[5]	1: 1,631	-	-

[1] Source: Alberta Pharmaceutical Association. Number of Pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1983, 1984, and 1985. Excludes inactive, honorary, and retired members.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: (i) **Rollcall 85**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to dentists registered with their respective provincial professional associations.

[5] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year baccalaureate program in pharmacy. The program produced 60 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR PHARMACISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	87	100	104
2nd Year	76	96	93
3rd Year	88	64	88
4th Year	104	85	60
Graduates:	97	75	60

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Division of Continuing Pharmacy Education of the Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta annually publishes a booklet, **Prospectives**, which outlines continuing education programs and courses that are currently available for pharmacists. The programs are sponsored by the Faculty of Pharmacy and Pharmaceutical Sciences, the Alberta Pharmaceutical Association, and various pharmaceutical manufacturing companies.

Continuing education programs are available to members through other sources: the Canadian Pharmaceutical Association, the American Pharmaceutical Association and some pharmaceutical manufacturing companies.

PHARMACY ASSISTANTS

I. OVERVIEW

Definition: Assist pharmacist in hospital, industrial or retail pharmacy. Compound and mix ointments, solutions, lotions or other medications, according to specific instructions, under supervision of pharmacist. Pre-package drugs. Label drugs, chemical or other pharmaceutical preparations. Assist with keeping records of narcotics issued and returned. Count drugs issued, keeps inventory and prepare orders for suppliers, as approved by the pharmacist. Unpack and store supplies and verify items received against invoices. Wash and sterilize bottles, beakers and other glassware and utensils. Clean pharmacy work area. Answer inquiries at wicket and deliver drug items, if required. Compute charges for narcotics and pharmaceuticals dispensed from pharmacy, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for pharmacy assistants, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 319 pharmacy assistants practicing in Alberta in 1985.[1] About 65 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial pharmacy assistant-to-population ratio was 1:7,436 in 1985. Since the March 31, 1984 survey did not count all pharmacy assistants, data from the 1984 survey and the 1985 survey are not comparable. The last comprehensive survey was conducted on September 30, 1983.[2] According to that survey there were 332 pharmacy assistants practicing in Alberta in 1983.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

None.

c) Legislation:

There is no legislation regulating pharmacy assistants in Alberta at present.

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[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PHARMACY ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	58,400	1: 11,680
2 (Lethbridge)	15	118,900	1: 7,927
3 (Pincher Creek)	1	38,800	1: 38,800
4 (Hanna)	0	12,900	-
5 (Drumheller)	2	41,300	1: 20,650
6 (Calgary)[3]	1	71,457	1: 71,457
7 (Stettler)	7	42,900	1: 6,129
8 (Red Deer)	28	136,100	1: 4,861
9 (Banff)	1	23,700	1: 23,700
10 (Camrose)	11	82,300	1: 7,482
11 (Edmonton)[4]	2	119,884	1: 59,942
12 (Fort McMurray)	15	93,900	1: 6,260
13 (Whitecourt)	3	56,900	1: 18,967
14 (Hinton)	2	27,200	1: 13,600
15 (Grande Prairie)	19	139,200	1: 7,326
Census Metropolitan Area of Calgary	81	625,143[5]	1: 7,718
Census Metropolitan Area of Edmonton	126	683,016[5]	1: 5,420
PROVINCIAL TOTAL	319	2,372,000	1: 7,436

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACY ASSISTANTS IN ALBERTA, 1983, 1984 AND 1985

	1983	1984	1985
Number of Practicing Personnel	332[1]	120[2]	319[3]
% Change in Number of Practicing Personnel	23.0%	N/A	N/A
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios: - Alberta	1: 7,098	1: 19,687	1:7,436

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: Because pharmacies were not surveyed in 1984, not all practicing pharmacy assistants in the province were counted in 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: "Alberta Health and Social Services Disciplines Committee, December 1985. Note: Comparison with the 1984 survey is not possible since it is not a comprehensive survey.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to the establishment of the pharmacy technology program, most pharmacy assistants in Alberta were trained on the job. However, in 1976 a one-year program leading to a pharmacy technician certificate was established at the Red Deer College. The program produced 33 graduates in 1984-85.

TABLE 2 BASIC EDUCATION PROGRAM FOR PHARMACY ASSISTANTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Red Deer Community College (Program Length: 1 year)			
Enrolments:	31	36	43
Graduates:	24	33	33

[1] Source: **Alberta Health and Social Services Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

There were no continuing education programs for pharmacy assistants in Alberta in 1985.

PHYSICAL THERAPISTS

I. OVERVIEW

Definition: Plan and carry out programs of physical treatment, in consultation with physicians and other health care workers, to rehabilitate injured or disabled patients. Administer muscle, nerve, joint and functional ability tests to identify physical problems of patient. Assess patient's symptoms and capabilities. Direct and aid patients individually or in groups, in activities designed to assist in muscle restoration and joint mobility. Guide patient in remedial activities involving use of parallel bars, weights, traction and other equipment. Gives whirlpool and contrast baths and applies moist packs. Administer treatments, using diathermy, ultrasonic and microwave machines, infrared and ultra-violet lamps, low-voltage generators and other electrotherapeutic equipment. Instructs patients and their families in procedures to be continued at home. Record treatments given and patient's response and progress.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

As of 1985 physical therapists are required to register with the College of Physical Therapists. There were 942 physical therapists who were residing in Alberta and registered with the College of Physical Therapists in 1985. About 77 percent of the physical therapists were located in the Census Metropolitan Areas of Calgary and Edmonton. The provincial physical therapist-to population ratio was 1: 2,518 in 1985.

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[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College of Physical Therapists and residing in Alberta as of December 31, 1985. Excludes out-of-province, retired, and non-practicing members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

College of Physical Therapists of Alberta
#302, 6020 - 104 Street
Edmonton, Alberta
T6H 5S4

Registrar: Ms. JoAnne Horne

b) **Professional Association:**

Alberta Physiotherapy Association
P.O. Box 4627, Station C
Calgary, Alberta
T2T 5P1

President: Ms. Alix Jackson

c) **Legislation:**

The **Physical Therapy Profession Act** (except the section dealing with exclusive scope of practice) was proclaimed on September 30, 1985. This act has replaced the **Chartered Physiotherapists Act**. The Act does not require mandatory registration of all physical therapists practicing in the province, but all individuals who wish to use the title of "physical therapist" or "physiotherapist" must register with the College of Physical Therapists. Annual re-registration is required of all individuals who wish to continue to use the title of "physical therapist" or "physiotherapist."

The College of Physical Therapists of Alberta is responsible for regulating the conduct of its members and for maintaining professional discipline. The Council of the College also sets the educational qualifications required for registration. All members of the Canadian Physiotherapists Association and graduates of physiotherapy training programs from Canadian universities are eligible for membership in the College. Others must apply to the Universities Coordinating Council for examination of qualifications for membership in the college.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PHYSICAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	12	58,400	1: 4,867
2 (Lethbridge)	20	118,900	1: 5,945
3 (Pincher Creek)	6	38,800	1: 6,467
4 (Hanna)	2	12,900	1: 6,450
5 (Drumheller)	5	41,300	1: 8,260
6 (Calgary)[3]	20	71,457	1: 3,573
7 (Stettler)	6	42,900	1: 7,150
8 (Red Deer)	45	136,100	1: 3,024
9 (Banff)	7	23,700	1: 3,386
10 (Camrose)	13	82,300	1: 6,331
11 (Edmonton)[4]	24	119,884	1: 4,995
12 (Fort McMurray)	18	93,900	1: 5,217
13 (Whitecourt)	9	56,900	1: 6,322
14 (Hinton)	5	27,200	1: 5,440
15 (Grande Prairie)	21	139,200	1: 6,629
Census Metropolitan Area of Calgary	308	625,143[5]	1: 2,030
Census Metropolitan Area of Edmonton	421	683,016[5]	1: 1,622
PROVINCIAL TOTAL	942	2,372,000	1: 2,518

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[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31, 1985. Excludes out-of-province, retired, and non-practicing members.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF PHYSICAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	308	625,143	1: 2,030
Census Metropolitan Area of Edmonton	421	683,016	1: 1,622
Between 10,000 and 60,000			
Airdrie	0	10,431	-
Camrose	3	12,751	1: 4,250
Fort McMurray	13	36,810	1: 2,832
Grande Prairie	12	25,056	1: 2,088
Leduc	2	12,926	1: 6,463
Lethbridge	12	59,901	1: 4,992
Lloydminster	1	10,557	1: 10,557
Medicine Hat	11	41,717	1: 3,792
Red Deer	31	52,620	1: 1,697
Spruce Grove	7	11,569	1: 1,653
Wetaskiwin	2	10,022	1: 5,011
Between 5,000 and 10,000			
Bonnyville	1	5,223	1: 5,223
Brooks	2	9,421	1: 4,711
Crownest Pass	0	7,577	-
Drumheller	0	6,671	-
Edson	4	7,110	1: 1,778
High River	3	5,114	1: 1,705
Hinton	1	8,904	1: 8,904
Innisfail	2	5,435	1: 2,718
Lacombe	1	5,954	1: 5,954
Peace River	4	6,043	1: 1,511
Ponoka	3	5,221	1: 1,740
Rocky Mountain House	0	5,126	-
St. Paul	0	5,052	-
Stettler	2	5,136	1: 2,568
Stony Plain	2	5,291	1: 2,646
Taber	1	6,384	1: 6,384
Vegreville	2	5,251	1: 2,626
Whitecourt	2	5,408	1: 2,704
Under 5,000	89	669,160	1: 7,518
TOTAL	942	2,372,000	1: 2,518

---

[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31, 1985. Excludes out-of-province, retired, and non-practicing members.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSICAL THERAPISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	669[1]	598[2]	942[3]
% Change in Number of Practicing Personnel	5.5%	N/A[4]	N/A[4]
Population (Alberta)	2,356,500[5]	2,362,400[6]	2,372,000[6]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 3,522	1: 3,951	1: 2,518
- Western Canada[7]	1: 3,221	-	-
- Canada[8]	1: 4,146	-	-

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The 1984 survey is not a comprehensive survey, and not all physical therapists in the province were counted.

[3] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31, 1985. Excludes out-of-province, retired, and non-practicing members.

[4] Since the 1985 manpower information is from the College of Physical Therapists, and information for previous years is from the surveys of employers, the data are not comparable.

[5] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[6] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[7] Source: (i) **Rollcall 83**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy, Research and Management Services Branch, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

[8] Source: **Canada Health Manpower Inventory, 1984,** Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to 1977, the University of Alberta offered a three-year diploma program and a four-year baccalaureate degree program in physical therapy. Now, only the four-year baccalaureate degree program is offered. The program produced 42 graduates in 1984-85. In addition, the University of Alberta also offers a masters degree program in physical therapy, which is approximately two years in length. The program produced three graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSICAL THERAPISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
A. BACCALAUREATE PROGRAM			
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	45	46	46
2nd Year	37	41	43
3rd Year	34	43	40
4th Year[2]	55	43	48
Graduates:	56	45	42
B. MASTERS PROGRAM			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	5	3	1
2nd Year	4	5	3
3rd Year	1	3	4
Graduates:	-	1	3

---

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] Increases in the fourth year enrolments were due to graduates of the diploma program returning to complete the baccalaureate degree program.

b) Continuing Education Programs:

The Alberta Physiotherapy Association and local district branches of the Canadian Physiotherapy Association offered several continuing education programs for physical therapists. The Alberta Association of Registered Occupational Therapists and the Alberta Dental Association also provided continuing education programs relevant to physical therapy.

PHYSICIANS

I. OVERVIEW

Definition: The work of physicians is concerned with preventing, diagnosing and treating human illnesses. Activities include: conducting medical examinations, making diagnoses, prescribing and giving treatment for diseases, disorders and injuries of the human body and applying preventive medicine as well as rehabilitative techniques; performing surgical operations in the treatment of injuries, diseases and disorders of the human body and engaging in clinical research within the field of activities and scope of competence.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 3,773 physicians who were residing in Alberta and registered with the College of Physicians and Surgeons of Alberta in 1985.[1] Of these physicians, 53 percent were general practitioners and 47 percent were specialists. The number of physicians by specialty is shown in the table on page 184.

About 74 percent of the physicians were located in the Census Metropolitan Areas of Calgary and Edmonton. Approximately 12 percent were located in communities with a population of between 10,000 and 60,000. About 4 percent were located in communities with a population of between 5,000 and 10,000; and 10 percent were located in communities with a population of less than 5,000. The number of physicians registered in Alberta grew by 13.8 percent between 1983 and 1985, while the provincial population increased by 0.7 percent during the same period. The physician-to-population ratio was 1:629 in 1985.

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians fully registered with the College of Physicians and Surgeons and residing in Alberta as of December 31, 1985. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

College of Physicians and Surgeons of Alberta
9901 - 108 Street
Edmonton, Alberta
T5K 1G8

Registrar: Dr. L. H. LeRiche

b) Professional Association:

Alberta Medical Association
#304, 9901 - 108 Street
Edmonton, Alberta
T5K 1G8

President: Dr. D.C. Perry

c) Legislation:

Under the authority of the **Medical Profession Act**, all individuals who wish to practice as physicians or osteopaths must register with the College of Physicians and Surgeons of Alberta. Annual re-registration with the College is required of all physicians who wish to continue to practice in Alberta.

The College of Physicians and Surgeons of Alberta is responsible for regulating the conduct of physicians and osteopaths and for maintaining professional discipline. The **Medical Profession Act** sets the basic educational qualifications required for registration with the College. However, the College sets the post-basic educational qualifications required for registration as a medical specialist. The College also prescribes the educational qualifications and conditions of practice of physicians registered on its special registries.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PHYSICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	63	58,400	1: 927
2 (Lethbridge)	155	118,900	1: 767
3 (Pincher Creek)	36	38,800	1: 1,078
4 (Hanna)	10	12,900	1: 1,290
5 (Drumheller)	31	41,300	1: 1,332
6 (Calgary)[3]	56	71,457	1: 1,276
7 (Stettler)	32	42,900	1: 1,341
8 (Red Deer)	166	136,100	1: 820
9 (Banff)	31	23,700	1: 765
10 (Camrose)	75	82,300	1: 1,097
11 (Edmonton)[4]	82	119,884	1: 1,462
12 (Fort McMurray)	86	93,900	1: 1,092
13 (Whitecourt)	38	56,900	1: 1,497
14 (Hinton)	21	27,200	1: 1,295
15 (Grande Prairie)	105	139,200	1: 1,326
Census Metropolitan Area of Calgary	1,229	625,143[5]	1: 509
Census Metropolitan Area of Edmonton	1,557	683,016[5]	1: 439
PROVINCIAL TOTAL	3,773	2,372,000	1: 629

---

[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1985. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B

NUMBER OF PHYSICIANS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	1,229	625,143	1: 509
Census Metropolitan Area of Edmonton	1,557	683,016	1: 439
Between 10,000 and 60,000			
Airdrie	4	10,431	1: 2,608
Camrose	21	12,751	1: 607
Fort McMurray	37	36,810	1: 995
Grande Prairie	39	25,056	1: 642
Leduc	15	12,926	1: 862
Lethbridge	123	59,901	1: 487
Lloydminster	14	10,557	1: 754
Medicine Hat	53	41,717	1: 787
Red Deer	105	52,620	1: 501
Spruce Grove	12	11,569	1: 964
Wetaskiwin	18	10,022	1: 557
Between 5,000 and 10,000			
Bonnyville	9	5,223	1: 580
Brooks	10	9,421	1: 942
Crowsnest Pass	0	7,577	-
Drumheller	13	6,671	1: 513
Edson	9	7,110	1: 790
High River	8	5,114	1: 639
Hinton	12	8,904	1: 742
Innisfail	9	5,435	1: 604
Lacombe	8	5,954	1: 744
Peace River	10	6,043	1: 604
Ponoka	19	5,221	1: 275
Rocky Mountain House	9	5,126	1: 570
St. Paul	6	5,052	1: 842
Stettler	8	5,136	1: 642
Stony Plain	11	5,291	1: 481
Taber	8	6,384	1: 798
Vegreville	7	5,251	1: 750
Whitecourt	6	5,408	1: 901
Under 5,000	384	669,160	1: 1,743
TOTAL	3,773	2,372,000	1: 629

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1985. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSICIANS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	3,315	3,701	3,773
% Change in Number of Registered Personnel	0.0%	11.6%	1.9%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 711	1: 638	1: 629
- Western Canada[4]	1: 571	1: 554	-
- Canada[5]	1: 512	-	-

---

[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] The 1983 and 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to physicians registered with their respective provincial professional associations.

[5] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are two medical schools in Alberta, located at the University of Alberta and the University of Calgary. The University of Alberta program is four years in length, based on a nine-month academic year; the University of Calgary program is three years in length, based on a 12-month academic year. Successful completion of a two-year pre-medicine program is the basic entry requirement for both programs. The two programs together produced 183 graduates in 1984-85.

There exists a pre-licensure requirement in Alberta, which is two years in length. Post-graduate physicians pursuing a specialty certification must write and pass the certification examinations of the Royal College of Physicians and Surgeons of Canada and complete an approved residency training period in an accredited teaching hospital.

With respect to post-graduate medical training, the Department of Hospitals and Medical Care establishes the number of funded intern/residency positions with the co-operation of the two medical schools. The medical schools, in co-operation with teaching hospitals in Calgary and Edmonton, then apportion the total funded positions among the various medical specialties. During academic year 1985-86, 663 full-time-equivalent intern/residency positions in Alberta teaching hospitals were funded by the Department of Hospitals and Medical Care.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSICIANS IN ALBERTA[1]

	1982-83	1983-84	1984-85
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	120	119	120
2nd Year	116	115	117
3rd Year	117	114	112
4th Year	118	115	114
Graduates:	118	115	114
University of Calgary (Program Length: 3 years)			
Enrolments:			
1st Year	75	74	74
2nd Year	71	72	72
3rd Year	70	71	70
Graduates:	68	67	69
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	186	182	183

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Departments of Continuing Medical Education at the University of Alberta and the University of Calgary offered many continuing education programs for physicians in Alberta in 1985. In addition, the Alberta Medical Association and other organizations and agencies offered various continuing education programs.

APPENDIX PHYSICIANS BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1985[1]

Specialty	Number of Physicians	Personnel-to-Population Ratio
Anaesthesia	147	1: 16,136
Anatomical Pathology	31	1: 76,516
Cardiology	29	1: 81,793
Cardiovascular & Thoracic Surgery	16	1: 148,250
Clinical Immunology	1	1:2,372,000
Community Medicine	14	1: 169,429
Dermatology	21	1: 112,952
Diagnostic Radiology	147	1: 16,136
Endrocrinology	3	1: 790,667
Emergency Medicine	16	1: 148,250
Gastroenterology	16	1: 148,250
General Pathology	64	1: 37,063
General Surgery	167	1: 14,204
Geriatric Medicine	2	1:1,186,000
Haematological Pathology	4	1: 593,000
Haematology	7	1: 338,857
Infectious Diseases	4	1: 593,000
Internal Medicine	286	1: 8,294
Medical Biochemistry	5	1: 474,400
Medical Microbiology	9	1: 263,556
Nephrology	2	1:1,186,000
Neurology	36	1: 65,889
Neuropathology	5	1: 474,400
Neurosurgery	16	1: 148,250
Nuclear Medicine	7	1: 338,857
Obstetrics & Gynaecology	121	1: 19,603
Ophthalmology	64	1: 37,063
Orthopaedic Surgery	72	1: 32,944
Otolaryngology	32	1: 74,125
Pediatrics	144	1: 16,472
Pediatric Cardiology	1	1:2,372,000
Pediatrics General Surgery	4	1: 593,000
Physical Medicine & Rehabilitation	10	1: 237,200
Plastic Surgery	28	1: 84,714
Psychiatry	155	1: 15,303
Radiation Oncology	22	1: 107,818
Respiratory Medicine	14	1: 169,429
Rheumatology	13	1: 182,462
Thoracic Surgery	1	1:2,372,000
Urology	36	1: 65,889
Vascular Surgery	3	1: 790,667
Specialty Total	1,775	1: 1,336
General Practice	1,998	1: 1,187
GRAND TOTAL	3,773	1: 629

---

[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1985. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

PODIATRISTS

I. OVERVIEW

Definition: A Podiatrist treats ailments, diseased conditions, deformities or injuries of the human foot and the leg muscles controlling the foot; examines, diagnoses and treats such ailments, conditions, deformities or injuries but does not treat systemic diseases of bones, muscles or ligaments, or does not use X-ray equipment for purposes other than diagnostic, or does not use anaesthetics other than local.

(Source: **Podiatry Act**, 1968)

There were 18 podiatrists who were residing in Alberta and registered with the Alberta Podiatry Association (A.P.A.) in 1985.[1]. The number of podiatrists has remained the same in the province since 1983. All of the podiatrists were located in four major urban centres: the Census Metropolitan Areas of Calgary and Edmonton and the cities of Lethbridge and Medicine Hat. The provincial podiatrist-to-population ratio was 1:131,778 in 1985.

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[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

Board of Examiners in Podiatry
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) **Professional Association:**

Alberta Podiatry Association
#606, 1701 Centre Street N.W.
Calgary, Alberta
T2E 7Y2

President: Dr. Paul Kruper

c) **Legislation:**

Under the authority of the **Podiatry Act**, all individuals who wish to practice as podiatrists in the province must apply to the Board of Examiners for Podiatry, a provincial government certification body. If an individual is eligible, the Board issues a certificate of approval for registration. All successful applicants must register with the Alberta Podiatry Association (A.P.A.) and annual re-registration with the Association is required of all podiatrists in order to continue to practice in Alberta.

The A.P.A. is responsible for regulating the conduct of its members and for maintaining professional discipline. The Board of Examiners for Podiatry sets the educational qualifications required for registration with the A.P.A.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PODIATRISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	58,400	1: 58,400
2 (Lethbridge)	1	118,900	1:118,900
Other Census Divisions[3]	0	886,541	-
Census Metropolitan Area of Calgary	10	625,143[4]	1: 62,514
Census Metropolitan Area of Edmonton	6	683,016[4]	1:113,836
PROVINCIAL TOTAL	18	2,372,000	1:131,778

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Areas of Calgary and Edmonton.

[4] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PODIATRISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	18	18	18
% Change in Number of Registered Personnel	12.5%	0.0%	0.0%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1:130,917	1:131,244	1:131,778
- Canada[4]	1: 90,142	-	-

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[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1983, 1984 and 1985.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no training programs for podiatrists in Canada. The United States has five schools of podiatry which offer four-year training programs in podiatry following two years of university preparation. Most of Alberta's podiatrists were trained in the United States.

b) Continuing Education Programs:

A number of continuing education programs were offered throughout Canada and the United States, which podiatrists were encouraged to attend.

PROSTHETISTS AND ORTHOTISTS

I. OVERVIEW

Definition: Design, build, fit and repair prosthetic and orthotic appliances to correct physical defects of human body. Interpret physician's specifications for prosthesis (artificial limb) or orthosis (support or brace). Measure patient for appliance. Design or draw working sketch or model of prosthesis or orthosis required. Build or direct other workers to build prosthetic or orthotic appliance, using materials, such as plastic, wood, leather, steel, aluminium and padding and machine- and hand-tools. Fit patient with appliance and add or remove padding, adjust parts and change tension to achieve maximum comfort and optimum function. Revise working sketch to reflect changes and direct other workers to modify appliance. Advise patient in application, use and care of appliance. Service and repair appliance as necessary.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Prosthetists and Orthotists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 38 prosthetists and orthotists practicing in Alberta in 1985.[1] All of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial prosthetist/orthotist-to-population ratio was 1:62,421 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Prosthetists and Orthotists
c/o Prosthetic and Orthotic Department
Calgary General Hospital
841 Centre Avenue East
Calgary, Alberta
T2E 0A1

President: Mr. Arthur Colman

c) Legislation:

There is no legislation regulating prosthetists and orthotists in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PROSTHETISTS AND ORTHOTISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS METROPOLITAN AREA, ALBERTA, 1985

Census Metropolitan Area	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Census Metropolitan Area of Calgary	21	625,143[3]	1: 29,769
Census Metropolitan Area of Edmonton	17	683,016[3]	1: 40,177
Areas other than CMA Calgary and CMA Edmonton	0	1,063,841	-
PROVINCIAL TOTAL	38	2,372,000	1: 62,421

[1] Source: "March 31, 1985 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PROSTHETISTS AND ORTHOTISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	25[1]	45[2]	38[3]
% Change in Number of Practicing Personnel	8.7%	80.0%	-15.6%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratio: - Alberta	1: 94,260	1: 52,498	1: 62,421

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for prosthetists and orthotists in Alberta. Although many of the prosthetists and orthotists in the province are trained on-the-job, some have been trained in post-secondary educational institutions in other provinces such as the

British Columbia Institute of Technology (B.C.I.T.). Alberta signed an inter-provincial training agreement with B.C.I.T. and the British Columbia Government in 1981 to purchase two training places for prosthetists and orthotists at the B.C.I.T. every two years.

b) Continuing Education Programs:

There were no continuing education programs offered for prosthetists and orthotists in 1985.

PSYCHIATRIC NURSES

I. OVERVIEW

Definition: Provide nursing care to patients with mental and emotional problems in hospitals and clinics or in private homes. Administer prescribed medications and treatments and attend to total nursing care of assigned patients. Observe, record and report symptoms and changes in patient's condition. Confer with psychiatrists, psychologists, social workers, occupational therapists and other specialists to evaluate patient's condition and to plan therapy. Encourage patients to participate in routine work functions and recreational, community and other activities to build up self-confidence and to develop relationships with others. Counsel patients at home or in clinic and evaluate patient's adjustment in community.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Psychiatric Nurses Association of Alberta (P.N.A.A.) is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 645 psychiatric nurses practicing in Alberta in 1985.[1] About 85 percent of the practicing psychiatric nurses were employed in the Census Metropolitan Area of Edmonton and in the Town of Ponoka in Census Division 8, the locations of Alberta's two major psychiatric institutions. The psychiatric nurse-to-population ratio was 1: 3,678 in 1985. Some of the services provided by psychiatric nurses are also provided by registered nurses (see chapter on Registered Nurses).

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

b) Licensing, Registration, or Certification Authority:

Advisory Committee to the Psychiatric
Nursing Training Act
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Psychiatric Nurses Association of Alberta
P. O. Box 755
Ponoka, Alberta
TOC 2H0

Executive Director: Mr. E.S. Neufeldt

c) Legislation:

The **Psychiatric Nursing Training Act** restricts the practice of psychiatric nursing to persons certified by the Advisory Committee to the Psychiatric Nursing Training Act and to registered or graduate nurses. But according to the **Psychiatric Nurses Association Act**, family members of a mentally ill person, persons employed as domestics who do not hold themselves out to be psychiatric nurses, and registered nursing assistants are exempted under the Act.

Registration with the Psychiatric Nurses Association of Alberta is voluntary. To maintain active membership, an individual must have practiced psychiatric nursing at least one full year (or 200 actual days of work, which can be accumulated over a five-year period) in the preceeding five years.

The P.N.A.A. is responsible for regulating the conduct of its members and for maintaining professional discipline. The Advisory Committee to the Psychiatric Nursing Training Act can cancel the certification of a psychiatric nurse if warranted. The Committee is also responsible for setting the educational qualifications required for certification as a psychiatric nurse. Individuals who have taken required courses of study or equivalent training outside Alberta are eligible for certification.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PSYCHIATRIC NURSES AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	58,400	1: 14,600
2 (Lethbridge)	16	118,900	1: 7,431
3 (Pincher Creek)	17	38,800	1: 2,282
4 (Hanna)	1	12,900	1: 12,900
5 (Drumheller)	0	41,300	-
6 (Calgary)[3]	2	71,457	1: 35,729
7 (Stettler)	2	42,900	1: 21,450
8 (Red Deer)	166	136,100	1: 820
9 (Banff)	0	23,700	-
10 (Camrose)	7	82,300	1: 11,757
11 (Edmonton)[4]	3	119,884	1: 39,961
12 (Fort McMurray)	3	93,900	1: 31,300
13 (Whitecourt)	1	56,900	1: 56,900
14 (Hinton)	2	27,200	1: 13,600
15 (Grande Prairie)	17	139,200	1: 8,188
Census Metropolitan Area of Calgary	26	625,143[5]	1: 24,044
Census Metropolitan Area of Edmonton	378	683,016[5]	1: 1,807
PROVINCIAL TOTAL	645	2,372,000	1: 3,678

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF PSYCHIATRIC NURSES AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	26	625,143	1: 24,044
Census Metropolitan Area of Edmonton	378	683,016	1: 1,807
Between 10,000 and 60,000			
Airdrie	0	10,431	-
Camrose	3	12,751	1: 4,190
Fort McMurray	1	36,810	1: 36,810
Grande Prairie	11	25,056	1: 2,278
Leduc	1	12,926	1: 12,926
Lethbridge	13	59,901	1: 4,608
Lloydminster	1	10,557	1: 10,557
Medicine Hat	4	41,717	1: 10,429
Red Deer	53	52,620	1: 993
Spruce Grove	0	11,569	-
Wetaskiwin	1	10,022	1: 10,022
Between 5,000 and 10,000			
Bonnyville	0	5,223	-
Brooks	0	9,421	-
Crownest Pass	0	7,577	-
Drumheller	0	6,671	-
Edson	1	7,110	1: 7,110
High River	0	5,114	-
Hinton	1	8,904	1: 8,904
Innisfail	1	5,435	1: 5,435
Lacombe	0	5,954	-
Peace River	2	6,043	1: 3,022
Ponoka	110	5,221	1: 48
Rocky Mountain House	1	5,126	1: 5,126
St. Paul	1	5,052	1: 5,052
Stettler	1	5,136	1: 5,136
Stony Plain	1	5,291	1: 5,291
Taber	1	6,384	1: 6,384
Vegreville	2	5,251	1: 2,626
Whitecourt	0	5,408	-
Under 5,000	31	669,160	1: 21,586
TOTAL	645	2,372,000	1: 3,678

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[1] Source: "March 31, 1985 of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PSYCHIATRIC NURSES IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	701[1]	612[2]	645[3]
% Change in Number of Practicing Personnel	1.9%	N/A[4]	N/A[4]
Population (Alberta)	2,356,500[5]	2,362,400[6]	2,372,0005[6]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 3,362	1: 3,860	1: 3,678
- Western Canada[7]	1: 1,356	-	-

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: Because one of the major employers reported psychiatric nurses as registered nurses - psychiatric, the 1984 survey underreported the number of psychiatric nurses.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Since the 1984 survey underreported the number of psychiatric nurses, the 1984 figure and the 1985 figure are not comparable.

[5] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Bureau of Statistics, 1983.

[6] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[7] Source: (i) **Rollcall 83**. Vancouver, British Columbia: Divisions of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both Alberta Hospital - Edmonton and Alberta Hospital - Ponoka offer a two-year hospital-based psychiatric nursing diploma program. Before they are eligible for certification, students must pass the provincial examinations which are administered by Department of Educational Psychology, University of Alberta. The two programs together produced 56 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PSYCHIATRIC NURSES IN ALBERTA[1]

	1982-83	1983-84	1984-85
Alberta Hospital - Edmonton (Program Length: 2 years)			
Enrolments:			
1st Year	43	48	42
2nd Year	23	34	32
Graduates:	21	33	29
Alberta Hospital - Ponoka (Program Length: 2 years)			
Enrolments[2]:			
1st Year	30	34	38
2nd Year	35	35	27
Graduates:	28	35	27
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	49	68	56

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] Additional students were accepted into the second year in 1983-84.

b) Continuing Education Programs:

There were no continuing education programs offered for psychiatric nurses in 1985.

PSYCHOLOGISTS

I. OVERVIEW

Definition: A psychologist collects, interprets and applies scientific data for the purpose of investigating psychological phenomena and formulating and applying psychological principles and laws in predicting and controlling behaviour in society.

Studies human behaviour and mental processes and investigates and recommends or provides treatment of psychological problems. Plans and carries out experiments using human beings and animal subjects, observes behaviour, and measures mental and physical characteristics. Analyzes effects of hereditary, and environmental factors on individual thought and behaviour. Undertakes diagnosis, treatment and prevention of personality disorders and problems of maladjustment to social and occupational environment.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,329 certified psychologists who were residing in Alberta and registered with the Psychologists Association of Alberta (P.A.A.) in 1985.[1] Not all certified psychologists practice in the health care and social service sector. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 841 psychologists employed in health care and social service agencies and institutions in Alberta in 1985.[2]

About 85 percent of the certified psychologists resided in the Census Metropolitan Areas of Calgary and Edmonton. The number of certified psychologists in Alberta increased by 11.8 percent between 1983 and 1985 while the provincial population increased by 0.7 percent during the same period. The provincial certified psychologist-to-population ratio was 1:1,785 in 1985.

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[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1985. Excludes associate and student numbers.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

Psychologists Association of Alberta
Suite 900, Sunlife Place
10123 - 99 Street
Edmonton, Alberta
T5J 3H1

b) **Professional Association:**

Psychologists Association of Alberta
Suite 400, Sunlife Place
10123 - 99 Street
Edmonton, Alberta
T5J 3H1

President: Dr. J.A. Browne

c) **Legislation:**

Under the authority of the **Psychologists Act**, all individuals who wish to use the title of "Certified Psychologist" must register with the Psychologists Association of Alberta (P.A.A.). Annual re-registration with the P.A.A. is required of all individuals who wish to continue to practice use the title of "Certified Psychologist." However, actual membership in the P.A.A. is voluntary.

The P.A.A. is responsible for regulating the conduct of its members and certified psychologists and for maintaining professional discipline. The Psychologists Act sets the basic educational qualifications required for registration as a certified psychologist. Assessment and approval of academic qualifications for registration as a certified psychologist are performed by the Office of Professional Examinations of the Universities Coordinating Council.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PSYCHOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	58,400	1: 8,343
2 (Lethbridge)	36	118,900	1: 3,303
3 (Pincher Creek)	6	38,80	1: 6,467
4 (Hanna)	1	12,900	1: 12,900
5 (Drumheller)	7	41,300	1: 5,900
6 (Calgary)[3]	36	71,457	1: 1,985
7 (Stettler)	3	42,900	1: 14,300
8 (Red Deer)	54	136,100	1: 2,520
9 (Banff)	3	23,700	1: 7,900
10 (Camrose)	6	82,300	1: 13,717
11 (Edmonton)[4]	18	119,884	1: 6,660
12 (Fort McMurray)	12	93,900	1: 7,825
13 (Whitecourt)	13	56,900	1: 4,377
14 (Hinton)	1	27,200	1: 27,200
15 (Grande Prairie)	17	139,200	1: 8,188
Census Metropolitan Area of Calgary	561	625,143[5]	1: 1,114
Census Metropolitan Area of Edmonton	548	683,016[5]	1: 1,246
PROVINCIAL TOTAL	1,329	2,372,000	1: 1,785

---

[1] Source: Psychologists Assocition of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1985. Excludes associate and student members.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF PSYCHOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	561	625,143	1: 1,114
Census Metropolitan Area Of Edmonton	548	683,016	1: 1,246
Between 10,000 and 60,000			
Airdrie	6	10,431	1: 1,739
Camrose	3	12,751	1: 4,250
Fort McMurray	6	36,810	1: 6,135
Grande Prairie	6	25,056	1: 4,176
Leduc	4	12,926	1: 3,232
Lethbridge	31	59,901	1: 1,932
Lloydminster	0	10,557	-
Medicine Hat	7	41,717	1: 5,960
Red Deer	40	52,620	1: 1,316
Spruce Grove	3	11,569	1: 3,856
Wetaskiwin	3	10,022	1: 3,341
Between 5,000 and 10,000			
Bonnyville	0	5,223	-
Brooks	2	9,421	1: 4,711
Crowsnest Pass	0	7,577	-
Drumheller	1	6,671	1: 6,671
Edson	0	7,110	-
High River	4	5,114	1: 1,279
Hinton	1	8,904	1: 8,904
Innisfail	1	5,435	1: 5,435
Lacombe	0	5,954	-
Peace River	4	6,043	1: 1,511
Ponoka	10	5,221	1: 522
Rocky Mountain House	1	5,126	1: 5,126
St. Paul	2	5,052	1: 2,526
Stettler	0	5,136	-
Stony Plain	3	5,291	1: 1,764
Taber	1	6,384	1: 6,384
Vegreville	0	5,251	-
Whitecourt	2	5,408	1: 2,704
Under 5,000	79	669,160	1: 8,470
TOTAL	1,329	2,372,000	1: 1,785

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[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1985. Excludes associate and student members.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

III. PERSONNEL DATA

TABLE 2 SELECTED MANPOWER STATISTICS FOR PSYCHOLOGISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel	1,170[1]	1,298[2]	1,329[3]
% Change in Number of Registered Personnel	13.7%	N/A[4]	N/A[4]
Population (Alberta)	2,356,500[5]	2,362,400[6]	2,372,000[6]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 2,014	-	1:1,785
- Canada[7]	1: 3,620	-	-

[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1983. Excludes associate and student members.

[2] Source: Psychologists Association of Alberta. Note: Since a membership directory was not published by the Psychologists Association of Alberta in 1984, it was not possible to distinguish between certified and non-certified (e.g., student and associate) members. The number of registered personnel for 1984 includes both certified and non-certified psychologists.

[3] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1985. Excludes associate and student members.

[4] The 1984 figure and 1985 figure are not comparable because while the former includes both certified and non-certified psychologists, the latter includes only certified psychologists.

[5] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[6] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[7] Source: **Canada Health Manpower Inventory, 1984** Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are six masters degree programs in psychology in Alberta: Masters of Science at the University of Calgary, Masters of Arts and Masters of Science at the University of Alberta, the Masters of Education in Educational Psychology at the University of Alberta and the University of Calgary, and Masters of Science in Educational Psychology at the University of Calgary. The programs produced 54 graduates in 1984-85.

In addition, the University of Alberta and the University of Calgary have doctoral programs in both psychology and educational psychology. There were 24 graduates in 1984-85.

TABLE 2 BASIC EDUCATION PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
A. MASTERS PROGRAMS			
University of Alberta Master of Arts in Psychology (Program Length: variable)			
Enrolments:			
1st Year	1	5	6
2nd Year	-	1	4
3rd Year[2]	4	-	-
Graduates:	2	4	2
University of Alberta Masters of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	3	2	4
2nd Year	3	3	1
3rd Year[2]	7	2	3
Graduates:	3	3	2

TABLE 3 (cont'd)

	1982-83	1983-84	1984-85
University of Alberta Master of Education in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	59	68	60
2nd Year[3]	129	105	140
Graduates:	31	44	18
University of Calgary Master of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	13	9	9
2nd Year	9	12	12
3rd Year[2]	11	14	14
Graduates:	4	6	6
University of Calgary Master of Education in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	34	32	19
2nd Year[3]	33	37	40
Graduates:	7	11	11
University of Calgary Master of Science in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	33	20	10
2nd Year[2]	27	43	56
Graduates:	18	16	15
PROVINCIAL TOTAL:			
Number of Masters Programs: 6			
Graduates:	64	82	54

TABLE 3 (cont'd)

		1982-83	1983-84	1984-85
B.	DOCTORAL PROGRAMS			
	University of Alberta			
	Ph.D. In Psychology			
	(Program Length: variable)			
	Enrolments:			
	1st Year	2	8	2
	2nd Year	4	2	5
	3rd Year[2]	11	10	8
	Graduates:	6	5	2
	University of Alberta			
	Ph.D. in Educational Psychology			
	(Program Length: variable)			
	Enrolment:			
	1st Year	30	33	36
	2nd Year[3]	77	75	77
	Graduates:	16	10	13
	University of Calgary			
	Ph.D. in Psychology			
	(Program Length: variable)			
	Enrolments:			
	1st Year	-	3	3
	2nd Year	3	-	2
	3rd Year[2]	10	13	11
	Graduates:	1	3	5
	University of Calgary			
	Ph.D. in Educational Psychology			
	(Program Length: variable)			
	Enrolments:			
	1st Year	9	13	10
	2nd Year[3]	29	26	37
	Graduates:	4	9	4
	PROVINCIAL TOTAL			
	Number of Ph.D. Programs: 4			
	Graduates:	27	27	24

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[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] Third year refers to students enrolled in third and later years of the program.

[3] Second year refers to students enrolled in second and later years of the program.

b) Continuing Education Programs:

The Psychologists Association of Alberta, along with other agencies and organizations, offered a number of workshops and conferences for psychologists throughout 1985.

PUBLIC HEALTH INSPECTORS

I. OVERVIEW

Definition: Enforces laws and regulations governing health standards and provides advice, performing any combination of the following duties: Locates persons suspected of exposure to communicable diseases to prevent further spread of disease. Interviews exposed persons to secure information concerning other persons who may have been exposed. Advises people to obtain treatment. Inspects restaurants, hotels, cafeterias and other public places to ensure compliance with sanitation laws. Takes samples of water, food and air, and orders chemical, physical or biological tests to determine contamination. Visits plants where food, drugs, cosmetics and similar items are manufactured to investigate sanitary conditions and health and hygiene habits of persons handling consumer products. Destroys subgrades or prohibits sale of impure, toxic, damaged or misbranded items. Ascertains that required permits have been obtained and are displayed. Inspects nursing homes and hospitals to ensure conformance with standards and laws governing sanitation, facilities, ethical practices, maintenance of records and competence of personnel. Recommends changes in administrative procedures, facilities and standards to improve efficiency and service to patients. Applies regulations governing manufacture, labelling and sale of upholstered and stuffed articles to ensure use of approved materials. Inspects waste disposal sites to ensure that pollution control regulations are followed. Inspects water wells to enforce provisions of permits. Writes reports and issues violation notices and corrective orders.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980).

Since registration with the Canadian Institute of Public Health Inspectors is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

There were 131 public health inspectors practicing in Alberta in 1985.[1] Almost half of the practicing public health inspectors were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial public health inspector-to-population ratio was 1:18,107 in 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Board of Certification of Public Health Inspectors
Ottawa-Carleton Regional Health Unit
P.O. Box 5367, Station "S"
Ottawa, Ontario
K2C 3J1

Board Chairman: Mr. Phillip Barton, C.P.H.I.(C)

b) Professional Association:

Canadian Institute of Public Health Inspectors
(Alberta Branch)
9104 - 150 Avenue
Edmonton, Alberta
T2E 6M4

President: Mr. W.G. Chrapko

c) Legislation:

Public health inspectors in Alberta are regulated under the **Public Health Act**. According to a regulation under the **Public Health Act**, all individuals who wish to practice as public health inspectors for a local board of health established under the **Public Health Act** or **Health Unit Act** must be certified by the Board of Certification of Public Health Inspectors which is administered by the Canadian Institute of Public Health Inspectors. This requirement does not apply to persons who became public health inspectors prior to January 1, 1961 and who have continued in such positions since that date.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PUBLIC HEALTH INSPECTORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	58,400	1:14,600
2 (Lethbridge)	7	118,900	1:16,986
3 (Pincher Creek)	2	38,800	1:19,400
4 (Hanna)	2	12,900	1: 6,450
5 (Drumheller)	3	41,300	1:13,767
6 (Calgary)[3]	3	71,457	1:23,819
7 (Stettler)	4	42,900	1:10,725
8 (Red Deer)	6	136,100	1:22,683
9 (Banff)	3	23,700	1: 7,900
10 (Camrose)	4	82,300	1:20,575
11 (Edmonton)[4]	7	119,884	1:17,126
12 (Fort McMurray)	6	93,900	1:15,650
13 (Whitecourt)	2	56,900	1:28,450
14 (Hinton)	3	27,200	1: 9,067
15 (Grande Prairie)	10	139,200	1:13,920
Census Metropolitan Area of Calgary	29	625,143[5]	1:21,557
Census Metropolitan Area of Edmonton	36	683,016[5]	1:18,973
PROVINCIAL TOTAL	131	2,372,000	1:18,107

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PUBLIC HEALTH INSPECTORS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered or Practising Personnel	135[1]	136[2]	131[3]
% Change in Number of Registered or Practising Personnel	3.1%	0.8%	-3.8%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	3.8%	1.5%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1:17,456	1:17,371	1:18,107
- Canada[6]	1:30,515	-	-

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for public health inspectors in Alberta. The British Columbia Institute of Technology in Vancouver, the Ryerson Polytechnical Institute in Toronto, and College Regional Bourghemin in St. Hyacinthe, Quebec offer two-year diploma programs in public health inspection. In addition, Ryerson Polytechnical Institute offers a four-year baccalaureate degree program in environmental health. Most of the public health inspectors working in Alberta were trained in these post-secondary educational institutions. Athabasca University offers correspondence courses in public health through its environmental health program.

b) Continuing Education Programs:

An annual educational conference was held by the Canadian Institute of Public Health Inspectors. Various continuing education courses and in-service meetings related to public health were also offered.

RECREATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan, organize and direct program of recreational activities as part of treatment to rehabilitate mentally and physically disabled persons. Assess patient's aptitudes, capabilities, interests and motivations to determine recreational program. Plan program with individuals or groups. Organize, conduct and promote social events. Direct and coordinate games, sports, arts and crafts, drama and sightseeing tours. Train and direct volunteers. Adapt games according to patient's mental and physical abilities. Discuss patient's progress and submit reports. Feed and dress patients and perform other personal care duties, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for recreational therapists, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 206 recreational therapists practicing in Alberta in 1985.[1] About 63 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. There was an increase of 37 percent in the number of recreational therapists between 1983 and 1985 while the provincial population grew by 0.7 percent during the same period. The provincial recreational therapist-to-population ratio was 1:11,515 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

None.

c) Legislation:

There is no legislation regulating recreational therapists in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF RECREATIONAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	58,400	1: 11,680
2 (Lethbridge)	11	118,900	1: 10,809
3 (Pincher Creek)	3	38,800	1: 12,933
4 (Hanna)	0	12,900	1: -
5 (Drumheller)	7	41,300	1: 5,900
6 (Calgary)[3]	2	71,457	1: 35,729
7 (Stettler)	3	42,900	1: 14,300
8 (Red Deer)	28	136,100	1: 4,861
9 (Banff)	0	23,700	-
10 (Camrose)	4	82,300	1: 20,575
11 (Edmonton)[4]	3	119,884	1: 39,961
12 (Fort McMurray)	2	93,900	1: 46,950
13 (Whitecourt)	0	56,900	-
14 (Hinton)	0	27,200	-
15 (Grande Prairie)	9	139,200	1: 15,467
Census Metropolitan Area of Calgary	67	625,143[5]	1: 9,330
Census Metropolitan Area of Edmonton	62	683,016[5]	1: 11,016
PROVINCIAL TOTAL	206	2,372,000	1: 11,515

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RECREATIONAL THERAPISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	150[1]	172[2]	206[3]
% Change in Number of Practicing Personnel	-0.7%	14.7%	19.8%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios: - Alberta	1:15,710	1:13,735	1:11,515

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Mount Royal College offers a two-year leisure services-recreation therapy diploma program. This program was previously known as the associate diploma program in therapeutic recreation. The program produced nine graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAM FOR RECREATIONAL THERAPISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	36	31	35
2nd Year	11	14	16
Graduates:	7	19[2]	9

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] The number of graduates exceeds the number of second year enrolments because all part-time students are included in first year enrolments.

b) Continuing Education Programs:

There were no continuing education programs for recreational therapists in Alberta in 1985.

REGISTERED NURSES

I. OVERVIEW

Definition: Provides total nursing care for patients in hospitals, nursing homes, extended-care facilities and other establishments: Discusses and plans total nursing care of assigned patients with physician and other members of health team. Directs activities of nursing team or performs nursing activities to provide nursing care of patients. Administers prescribed medications and treatments. Observes, records and reports symptoms and changes in patients' condition. Makes nursing rounds and accompanies physician on medical rounds to evaluate needs of individual patients and to assess effectiveness of nursing care. Counsels patient and family in health care and treatment to be continued at home. Directs or carries out established procedures to prepare essential facilities and equipment, and assists physician in examiniations, treatments, surgery and deliveries. Performs nursing activities in obstetrics, paediatrics, orthopaedics and other clinical specializations.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 20,843 nurses who were residing in Alberta and registered with the Alberta Association of Registered Nurses (A.A.R.N.) in 1985.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, 16,213 registered nurses were employed as of March 31, 1985.[2] The number of practicing registered nurses by specialty is shown in the table on page 240. About 63 percent of the registered nurses were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of nurses registered in Alberta increased by 17.3 percent between 1983 and 1985, while the provincial population grew by 0.7 percent during the same period. The registered nurse-to-population ratio was 1:114 in 1985.

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1985. Excludes inactive, honorary, associate, and retired members.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Association of Registered Nurses
10256 - 112th Street
Edmonton, Alberta
T5K 1M6

b) Professional Association:

Alberta Association of Registered Nurses
10256 - 112th Street
Edmonton, Alberta
T5K 1M6

President: Ms. Betty Gourlay

c) Legislation:

Proclaimed on January 1, 1984, the **Nursing Profession Act** replaced the **Registered Nurses Act**. Subject to certain exemptions, the **Nursing Profession Act** requires all nurses practicing in Alberta to be registered under the Act. Individuals who wish to use the title of "Registered Nurse" must register with the Alberta Association of Registered Nurses.

The Act gives the Alberta Association of Registered Nurses the authority to enter registered nurses and certified graduate nurses into the appropriate registers, and to grant special permits and temporary permits to others who wish to practice under the Act.

The Act establishes a Practice Review Committee which has the authority to investigate the desirable standards of competence for nursing practice in general and the competence of particular registered nurses or permit holders. Complaints concerning unskilled practice and professional misconduct by registered nurses or permit holders may be investigated by the Professional Conduct Committee. Educational requirements for registration are established by the Universities Coordinating Council.

III. PERSONNEL DATA

TABLE 1A NUMBER OF REGISTERED NURSES AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	403	58,400	1: 145
2 (Lethbridge)	1,006	118,900	1: 118
3 (Pincher Creek)	244	38,800	1: 159
4 (Hanna)	89	12,900	1: 145
5 (Drumheller)	228	41,300	1: 181
6 (Calgary)[3]	473	71,457	1: 151
7 (Stettler)	261	42,900	1: 164
8 (Red Deer)	1,202	136,100	1: 113
9 (Banff)	169	23,700	1: 140
10 (Camrose)	546	82,300	1: 151
11 (Edmonton)[4]	735	119,884	1: 163
12 (Fort McMurray)	643	93,900	1: 146
13 (Whitecourt)	297	56,900	1: 192
14 (Hinton)	99	27,200	1: 275
15 (Grande Prairie)	747	139,200	1: 186
Census Metropolitan Area of Calgary	5,902	625,143[5]	1: 106
Census Metropolitan Area of Edmonton	7,195	683,016[5]	1: 95
Regional Location Unknown	604		
PROVINCIAL TOTAL	20,843	2,372,000	1: 114

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1985. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF REGISTERED NURSES AND PERSONNEL-TO-POPULATION RATIO BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	5,902	625,143	1: 106
Census Metropolitan Area of Edmonton	7,195	683,016	1: 95
Between 10,000 and 60,000			
Airdrie	71	10,431	1: 147
Camrose	119	12,751	1: 107
Fort McMurray	317	36,810	1: 116
Grande Prairie	252	25,056	1: 99
Leduc	102	12,926	1: 127
Lethbridge	668	59,901	1: 90
Lloydminster	49	10,557	1: 215
Medicine Hat	350	41,717	1: 119
Red Deer	668	52,620	1: 79
Spruce Grove	145	11,569	1: 80
Wetaskiwin	126	10,022	1: 80
Between 5,000 and 10,000			
Bonnyville	50	5,223	1: 104
Brooks	72	9,421	1: 131
Crowsnest Pass	45	7,577	1: 168
Drumheller	58	6,671	1: 115
Edson	43	7,110	1: 165
High River	73	5,114	1: 70
Hinton	49	8,904	1: 182
Innisfail	74	5,435	1: 73
Lacombe	76	5,954	1: 78
Peace River	61	6,043	1: 99
Ponoka	136	5,221	1: 38
Rocky Mountain House	50	5,126	1: 103
St. Paul	55	5,052	1: 92
Stettler	51	5,136	1: 101
Stony Plain	75	5,291	1: 71
Taber	59	6,384	1: 108
Vegreville	66	5,251	1: 80
Whitecourt	32	5,408	1: 169
Under 5,000	3,150	669,160	1: 212
Regional Location Unknown	604		
TOTAL	20,843	2,372,000	1: 114

---

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1985. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSES IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	17,770	20,124	20,843
% Change in Number of Registered Personnel	0.0%	13.2%	3.6%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 133	1: 117	1: 114
- Western Canada[4]	1: 122	1: 117	-
- Canada[5]	1: 115	-	-

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1983, 1984, and 1985. Excludes inactive, honorary, associate, and retired members.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] The 1983 and 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to nurses registered with their respective provincial professional associations.

[5] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1984-85, there were 14 basic education programs (11 diploma programs, two baccalaureate programs for registered nurses in Alberta, and one supplementary program in general nursing for registered psychiatric nurses leading to registered nurse status). These programs produced a total of 802 graduates (706 from the diploma programs and 96 from the baccalaureate programs) in 1984-85. Table 3A lists the basic education programs, including the supplementary program.

The two baccalaureate nursing programs were offered at the University of Alberta and the University of Calgary. Seven of the 11 diploma programs were offered at community colleges. The remaining programs were hospital-based.

In addition, there were ten post-basic education programs for registered nurses in Alberta. Five of the programs led to certificates and another five led to degrees (three post-basic baccalureate degree nursing for diploma nurses and two masters degree programs). These programs produced a total of 239 graduates in 1984-85. Table 3B lists the various post-basic education programs for registered nurses.

TABLE 3A BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1982-83	1983-84	1984-85
A. **DIPLOMA NURSING PROGRAMS**			
Grant MacEwan Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	91	88	92
2nd Year	81	73	45
Graduates:	71	65	47
Keyano College[2] (Program Length: 88 weeks)			
Enrolements:			
1st Year	-	24	34
Graduates:	-	-	13
Medicine Hat College (Program Length: 88 weeks)			
Enrolments:			
1st Year	63	60	52
2nd Year	22	22	44
Graduates:	26	11	20
Mount Royal College (Program Length: 88 weeks)			
Enrolments:			
1st Year	131	148	123
2nd Year	58	75	95
Graduates:	54	65	80
Red Deer College (Program Length: 88 weeks)			
Enrolments:			
1st Year	74	81	78
2nd Year	54	77	70
Graduates:	51	67	71
Lethbridge Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	60	84	102
2nd Year	38	54	55
Graduates:	28	38	55

TABLE 3A (cont'd)

	1982-83	1983-84	1984-85
Grande Prairie Regional College[3] (Program Length: 88 weeks)			
Enrolments:			
1st Year	21	26	25
2nd Year	-	16	22
Graduates	-	13	22
Royal Alexandra Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	120	126	130
2nd Year	81	92	95
3rd Year	69	68	80
Graduates:	69	68	80
Misericordia Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	70	90	90
2nd Year	63	63	77
3rd Year	53	57	55
Graduates:	52	56	51
Foothills Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	150	150	152
2nd Year	121	120	121
3rd Year	61	98	106
Graduates:	61	98	104
University of Alberta Hospitals (Program Length: 2 1/3 years)			
Enrolments:			
1st Year	180	180	174
2nd Year	99	155	155
3rd Year	104	92	153
Graduates:	104	89	153
PROVINCIAL TOTAL			
Number of Diploma Programs: 11			
Graduates:	516	570	696

TABLE 3A (cont'd)

	1982-83	1983-84	1984-85
B. SUPPLEMENTARY NURSING DIPLOMA PROGRAMS (FOR REGISTERED PSYCHIATRIC NURSES)			
Grant MacEwan Community College (Program Length: 13 months)			
Enrolments:			
1st Year	1	15	21
Graduates:	1	9	10
PROVINCIAL TOTAL			
Total number of Diploma Nursing Programs: 12			
Graduates:	517	579	706
C. BACCALAUREATE NURSING PROGRAMS			
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	79	104	107
2nd Year	48	72	104
3rd Year	47	47	69
4th Year	45	43	46
Graduates:	45	43	46
University of Calgary (Program Length: 4 years)			
Enrolments:			
1st Year	64	66	64
2nd Year	56	60	56
3rd Year	44	51	58
4th Year	47	40	52
Graduates:	47	39	50
PROVINCIAL TOTAL			
Number of Baccalaureate Programs: 2			
Graduates:	92	82	96

TABLE 3A (cont'd)

	1981-82	1982-83	1983-84
PROVINCIAL TOTAL			
Number of Basic Nursing Education Programs: 14			
Graduates:	609	661	802

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] This program commenced in 1983-84.

[3] This program commenced in 1982-83.

TABLE 3B POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1982-83	1983-84	1984-85
A. CERTIFICATE EDUCATION PROGRAMS			
Cardio-vascular Intensive Care Nursing[2] University of Alberta Hospitals (Program Length: variable)			
Enrolments: 1st year	8	-	-
Graduates:	7	-	-
Operating Room Nursing[2] University of Alberta Hospitals (Program Length: 24 weeks)			
Enrolments: 1st year	5	-	-
Graduates:	5	-	-
Occupational Health Nursing Grant MacEwan Community College (Program Length: 1 year)			
Enrolments: 1st year	49	33	43
Graduates:	46	11	12
Advanced Practical Obstetric Nursing[3] University of Alberta (Program Length: 26 weeks)			
Enrolments: 1st year	12	10	-
Graduates:	12	9	-
Nurse Practitioner[3] University of Alberta (Program Length: 5 months)			
Enrolments: 1st year	10	15	-
Graduates:	10	11	-

TABLE 3B (cont'd)

	1982-83	1983-84	1984-85
Extended Care Nursing			
Grant MacEwan Community College (Program Length: 1 year)			
Enrolments: 1st year	229	243	215
Graduates:	9	24	26
Mental Health Nursing			
Mount Royal College (Program Length: 1 year)			
Enrolments: 1st year	29	39	46
Graduates:	7	15	5
PROVINCIAL TOTAL			
Number of Post-Basic Certificate Programs: 5			
Graduates:	96	70	43
B. DEGREE EDUCATION PROGRAMS			
Baccalaureate Nursing Program for Diploma Nurses			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	108	142	141
2nd Year	139	124	144
Graduates:	104	103	107
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	50	50	50
2nd Year	45	40	39
Graduates:	55	48	52

TABLE 3B (cont'd)

	1982-83	1983-84	1984-85
University of Lethbridge (Program Length: 2 years)			
Enrolments:			
1st Year	21	37	104
2nd Year	24	11	32
Graduates:	23	10	27
PROVINCIAL TOTAL			
Number of Baccalaureate Nursing Programs for Diploma Nurses: 3			
Graduates:	182	161	186
C. GRADUATE DEGREE EDUCATION PROGRAMS			
Masters of Nursing			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	12	15	15
2nd Year	11	13	25
Graduates:	3	4	4
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	8	8	11
2nd Year	7	7	7
Graduates	7	6	6
PROVINCIAL TOTAL			
Number of Masters of Nursing Programs: 2			
Graduates:	10	10	10

TABLE 3B (cont'd)

	1982-83	1983-84	1984-85
PROVINCIAL TOTAL			
Number of Post-Basic Education Programs: 10			
Graduates:	288	241	239

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[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85.** Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] There are no figures available since 1982-83, because these programs have been placed under review.

[3] This program is no longer being offered.

b) Continuing Education Programs:

Continuing education courses and programs for registered nurses were made available through a number of sources in Alberta. The bylaws of the Alberta Association of Registered Nurses (A.A.R.N.) state that in order to be eligible for active registration, nurses must have been employed in the practice of nursing for 150 days in the past 5 membership years or provide evidence confirming their present competency to practice. In accordance with this regulation, the Association encourages the development of refresher programs for inactive nurses who intend to re-register. All refresher programs offered in Alberta must be approved by the A.A.R.N.

In 1984-85, twelve institutions (Foothills Hospital, Grant MacEwan Community College, Misericordia Hospital, Lethbridge Community College, Mount Royal College, Alberta Vocational Centre - Grouard, Alberta Vocational Centre - Lac La Biche, Grande Prairie Regional College, Keyano College, Lakeland College, Olds College, and University of Alberta Hospitals) offered refresher courses in nursing. There were 425 students enrolled in refresher courses in the 1984-85 academic year, and there were 213 graduates.

The A.A.R.N. sponsors workshops, lectures, seminars, and programs in conjunction with its annual convention on a variety of nursing issues.

The University of Alberta, the University of Calgary, and a number of colleges offered continuing education programs of interest to nurses, throughout the province. Orientation programs, in-service programs, and other types of continuing education programs were offered by individual employing agencies. Programs varied in length and covered a wide range of topics.

APPENDIX

REGISTERED NURSES BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1985[1]

Specialty	Number of Practicing Nurses	Personnel-to-Population Ratio
Administrative	1,535	1: 1,545
Community/Public Health	728	1: 3,258
Emergency Room	492	1: 4,821
Home Care	336	1: 7,060
Intensive Care Units (C.C.U., I.C.U., Burn)	1,175	1: 2,019
Intravenous Therapy	42	1:56,476
Labor Delivery Recovery Suite	305	1: 7,777
Long Term Care/Rehabilitation	1,426	1: 1,663
Maternal/Child	660	1: 3,594
Medical, Surgical	3,931	1: 603
Nursing Education	759	1: 3,125
Occupational/Staff Health	495	1: 4,792
Operating Room	652	1: 3,638
Out Patient Services	208	1:11,404
Paediatrics	609	1: 3,895
Physicians' Offices, Medical or School Clinics	384	1: 6,177
Psychiatric	664	1: 3,572
Recovery Room	137	1:17,314
Short Stay Unit Staff	125	1:18,976
Specialty Total	14,663	1: 162
Others	1,550	1: 1,530
GRAND TOTAL	16,213	1: 146

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

Note: The total number of personnel in this table is less than the total number of personnel in Table 1. This is because this table shows the number of practicing personnel as of March 31, 1985, whereas Table 1 shows the number of nurses who were registered with the Alberta Association of Registered Nurses as of September 30, 1985.

REGISTERED NURSING ASSISTANTS

I. OVERVIEW

Definition:	Provide nursing care for patients in hospitals, nursing homes, clinics and similar establishments. Take and record blood pressure, temperature, pulse and respiration rates. Apply dressings and administer injections, medications and treatments under supervision. Report and record observations and symptoms indicative of change in condition of patients. Assist with admission and discharge of patients. Bathe patients, make beds and assist with rehabilitation procedures. Feed and assist patients in feeding themselves. Answer call-bells and patients' or visitors' inquiries and perform other bedside services. Perform duties in operating room, outpatients and other specialized areas, if required. (Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

In 1977 certified nursing aides and registered nursing orderlies were re-named registered nursing assistants in accordance with the **Nursing Assistants Registration Act** of 1976.

There were 7,643 nursing assistants who were residing in Alberta and registered with the Nursing Assistants Registration Board in 1985.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 4,144 registered nursing assistants employed as of March 31, 1985.[2] Half of the registered nursing assistants were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of registered nursing assistants in Alberta increased by 3.9 percent between 1983 and 1985, while the provincial population grew by 0.7 percent during the same period. The registered nursing assistant-to-population ratio was 1:310 in 1985.

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[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assistants Registration Board and residing in Alberta as of December 31, 1985.

[2] Source: "March 31, 1985 Survey of Employers of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Nursing Assistants Registration Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Chairman: Mr. J. Briggs

b) Professional Associations:

Alberta Association of Registered Nursing Assistants[1]
17410 - 107 Avenue
Edmonton, Alberta
T5S 1E9

President: Ms. Roberta Metheral

Alberta Association of Registered Nursing Orderlies
9606 - 71 Avenue
Edmonton, Alberta
T6E 0W4

President: Mr. Finn Didrichsen

c) Legislation:

Under the authority of the **Nursing Assistants Registration Act**, all individuals who wish to use the title of "Registered Nursing Assistant" must register with the Nursing Assistants Registration Board, a provincial government licensing body. Annual re-registration with the Board is required of all individuals who wish to continue to use the title of "Registered Nursing Assistant." Membership with the Alberta Association of Registered Nursing Assistants or the Alberta Association of Registered Nursing Orderlies is voluntary.

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[1] Formerly the Alberta Certified Nursing Aide Association.

The Nursing Assistants Registration Board sets the basic educational qualifications required for registration with the Board for nursing assistants trained outside of Alberta. The Minister of Advanced Education sets the basic educational qualifications required for registration with the Board for nursing assistants trained in Alberta.

In November 1983 nursing assistants were designated under the **Health Disciplines Act** as a health discipline. The Minister Responsible for Professions and Occupations established a health disciplines committee for nursing assistants in September 1984. This committee is preparing draft regulations for presentation to the Health Disciplines Board.

III. PERSONNEL DATA

TABLE 1A NUMBER OF REGISTERED NURSING ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	189	58,400	1: 309
2 (Lethbridge)	371	118,900	1: 320
3 (Pincher Creek)	155	38,800	1: 250
4 (Hanna)	89	12,900	1: 145
5 (Drumheller)	134	41,300	1: 308
6 (Calgary)[3]	245	71,457	1: 292
7 (Stettler)	246	42,900	1: 174
8 (Red Deer)	424	136,100	1: 321
9 (Banff)	94	23,700	1: 252
10 (Camrose)	353	82,300	1: 233
11 (Edmonton)[4]	437	119,884	1: 274
12 (Fort McMurray)	239	93,900	1: 393
13 (Whitecourt)	216	56,900	1: 263
14 (Hinton)	56	27,200	1: 486
15 (Grande Prairie)	544	139,200	1: 256
Census Metropolitan Area of Calgary	1,476	625,143[5]	1: 424
Census Metropolitan Area of Edmonton	2,356	683,016[5]	1: 290
Regional Location Unknown	19		
PROVINCIAL TOTAL	7,643	2,372,000	1: 310

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[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assistants Registration Board and residing in Alberta as of December 31, 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF REGISTERED NURSING ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	1,476	625,143	1: 424
Census Metropolitan Area Of Edmonton	2,356	683,016	1: 290
Between 10,000 and 60,000			
Airdrie	35	10,431	1: 298
Camrose	66	12,751	1: 193
Fort McMurray	34	36,810	1: 1,083
Grande Prairie	123	25,056	1: 204
Leduc	62	12,926	1: 208
Lethbridge	183	59,901	1: 327
Lloydminster	20	10,557	1: 528
Medicine Hat	150	41,717	1: 278
Red Deer	176	52,620	1: 299
Spruce Grove	65	11,569	1: 178
Wetaskiwin	81	10,022	1: 124
Between 5,000 and 10,000			
Bonnyville	33	5,223	1: 158
Brooks	47	9,421	1: 200
Crowsnest Pass	55	7,577	1: 138
Drumheller	27	6,671	1: 247
Edson	24	7,110	1: 296
High River	37	5,114	1: 138
Hinton	23	8,904	1: 387
Innisfail	57	5,435	1: 95
Lacombe	19	5,954	1: 313
Peace River	40	6,043	1: 151
Ponoka	40	5,221	1: 131
Rocky Mountain House	39	5,126	1: 131
St. Paul	37	5,052	1: 137
Stettler	49	5,136	1: 105
Stony Plain	42	5,291	1: 126
Taber	29	6,384	1: 220
Vegreville	36	5,251	1: 146
Whitecourt	17	5,408	1: 318
Under 5,000	2,146	669,160	1: 312
Regional Location Unknown	19		
TOTAL	7,643	2,372,000	1: 310

---

[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assisants Registration Board and residing in Alberta as of December 31, 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSING ASSISTANTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Registered Personnel[1]	7,355	7,497	7,643
% Change in Number of Registered Personnel	9.1%	1.9%	1.9%
Population (Alberta)	2,356,500[2]	2,362,400[3]	2,372,000[3]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1:320	1:315	1:310
- Western Canada[4]	1:362	1:366	-
- Canada[5]	1:300	-	-

[1] Source: Alberta Nursing Assistants Registration Board. Number of nursing assistants registered with the Board and residing in Alberta as of December 31, 1983, 1984, and 1985.

[2] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1984.

[3] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] The 1983 information is based on: (i) **Rollcall Update 83**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. The 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee.

[5] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to academic year 1978-79, the Alberta Vocational Centres in Edmonton and Calgary offered separate nursing aide and nursing orderly programs, which were 10 months in length. The curriculum content and administrative structure of the nursing aide and nursing orderly programs have been revised. Beginning in 1978-79, these programs were formally amalgamated under the new title of "Nursing Assistant Certificate Program."

There were 324 graduates from the three training programs at the Alberta Vocational Centre - Calgary, Alberta Vocational Centre - Edmonton, and Alberta Vocational Centre - Grouard in 1984-85. The Calgary program includes outreach programs at Crowsnest Pass, Drumheller, and Claresholm. The program at the Alberta Vocational Centre - Grouard is brokered from the Alberta Vocational Centre - Edmonton.

TABLE 3 BASIC EDUCATION PROGRAMS FOR NURSING ASSISTANTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Alberta Vocational Centre - Calgary[2] (Program Length: 38 weeks)			
Enrolments	185	187	265
Graduates	152	97	151
Alberta Vocational Centre - Edmonton (Program Length: 1 year)			
Enrolments	212	182	225
Graduates	146	155	159
Alberta Vocational Centre - Grouard[3] (Program Length: 1 year)			
Enrolments	29	30	20
Graduates	18	24	14
PROVINCIAL TOTAL			
Number of Certificate Programs: 3			
Graduates	316	276	324

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[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] Enrolment and graduate data for 1982-83 include data for the outreach programs. This program is brokered by the Chinook Educational Consortium.

[3] This program is brokered from Alberta Vocational Centre, Edmonton.

b) Continuing Education Programs:

The Alberta Association of Registered Nursing Assistants offered continuing education programs on relevant topics for its members in 1985.

REHABILITATION PRACTITIONERS

I. OVERVIEW

Definition: Rehabilitation practitioners work in the provision of rehabilitation program to the developmentally handicapped in a community or institutional setting. These workers are normally responsible for the delivery of established care and developmental programs based on client's needs in the areas of residential, family support, vocational, social education, recreation/leisure or developmental day care.

(Source: Government of Alberta)

Since registration with the Alberta Association of Habilitative Practitioners is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 1,212 rehabilitation practitioners practicing in Alberta in 1985.[1] Slightly less than half of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. Another 28 percent were found in Census Division 8 where Michener Center, the province's largest institution for the developmentally handicapped, is located. The provincial rehabilitation practitioner-to-population ratio was 1:1,957 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

Health Disciplines Board
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) **Professional Association:**

Alberta Association of Habilitative Practitioners
P.O. Box 887
Red Deer, Alberta
T4N 1K7

President: Mrs. Adriana La Grange

c) **Legislation:**

In 1982 rehabilitation practitioners applied to the Health Occupations Board for designation under the **Health Occupations Act**. In November 1983 rehabilitation practitioners were designated as a health discipline under the **Health Disciplines Act** (formerly the **Health Occupations Act**). The Minister Responsible for Professions and Occupations established a Rehabilitation Practitioners Committee in November 1984. This committee is preparing draft regulations for presentation to the Health Disciplines Board (formerly the Health Occupations Board).

III. PERSONNEL DATA

TABLE 1A NUMBER OF REHABILITATION PRACTITIONERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	27	58,400	1: 2,163
2 (Lethbridge)	53	118,900	1: 2,243
3 (Pincher Creek)	5	38,800	1: 7,760
4 (Hanna)	1	12,900	1: 12,900
5 (Drumheller)	17	41,300	1: 2,429
6 (Calgary)[3]	9	71,457	1: 7,940
7 (Stettler)	8	42,900	1: 5,363
8 (Red Deer)	344	136,100	1: 396
9 (Banff)	8	23,700	1: 2,963
10 (Camrose)	38	82,300	1: 2,166
11 (Edmonton)[4]	47	119,884	1: 2,551
12 (Fort McMurray)	17	93,900	1: 5,524
13 (Whitecourt)	1	56,900	1: 56,900
14 (Hinton)	0	27,200	-
15 (Grande Prairie)	41	139,200	1: 3,395
Census Metropolitan Area of Calgary	226	625,143[5]	1: 2,776
Census Metropolitan Area of Edmonton	370	683,016[5]	1: 1,846
PROVINCIAL TOTAL	1,212	2,372,000	1: 1,957

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF REHABILTATION PRACTITIONERS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	226	625,143	1: 2,766
Census Metropolitan Area of Edmonton	370	683,016	1: 1,846
Between 10,000 and 60,000			
Airdrie	0	10,431	-
Camrose	7	12,751	1: 1,796
Fort McMurray	3	36,810	1: 12,270
Grande Prairie	38	25,056	1: 659
Leduc	0	12,926	-
Lethbridge	52	59,901	1: 1,152
Lloydminster	3	10,557	1: 3,519
Medicine Hat	27	41,717	1: 1,545
Red Deer	331	52,620	1: 159
Spruce Grove	0	11,569	-
Wetaskiwin	22	10,022	1: 456
Between 5,000 and 10,000			
Bonnyville	9	5,223	1: 580
Brooks	0	9,421	-
Crownest Pass	8	7,577	1: 947
Drumheller	17	6,671	1: 392
Edson	0	7,110	-
High River	0	5,114	-
Hinton	0	8,904	-
Innisfail	3	5,435	1: 1,812
Lacombe	6	5,954	1: 992
Peace River	0	6,043	-
Ponoka	1	5,221	1: 5,221
Rocky Mountain House	3	5,126	1: 709
St. Paul	3	5,052	1: 1,684
Stettler	0	5,136	-
Stony Plain	2	5,291	1: 2,646
Taber	0	6,384	-
Vegreville	17	5,251	1: 309
Whitecourt	0	5,408	-
Under 5,000	64	669,160	1: 10,456
TOTAL	1,212	2,372,000	1: 1,957

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REHABILITATION PRACTITIONERS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	1,331[1]	1,225[2]	1,212[3]
% Change in Number of Practicing Personnel	18.3%	-8.0%	-1.1%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios: - Alberta	1:1,770	1:1,928	1:1,957

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March, 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1984-85 Mount Royal College offered both a two-year diploma and a one-year certificate program in rehabilitation services. Grant MacEwan Community College, Lethbridge Community College, and Red Deer College now only offer the diploma program. Alberta Vocational Centre - Lac La Biche offered a certificate program. The diploma programs produced 139 graduates and the certificate programs produced 12 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1982-83	1983-84	1984-85
CERTIFICATE AND DIPLOMA PROGRAMS IN REHABILITATIVE SERVICES			
Grant MacEwan Community College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:			
1st Year	112	183	220
2nd Year	34	33	52
Graduates:			
Certificate[2]	36	-	-
Diploma	19	28	40
Lethbridge Community College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:			
1st Year	27	32	25
2nd Year	16	18	21
Graduates:			
Certificate[3]	-	-	-
Diploma	13	14	15

TABLE 3 (cont'd)

	1982-83	1983-84	1984-85
Alberta Vocational Centre -Lac La Biche (Program Length: certificate-36 weeks)			
Enrolments:			
1st Year	-	13	11
Graduates:			
Certificate	-	10	8
Mount Royal Community College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	51	74	76
2nd Year	19	23	47
Graduates:			
Certificate	-	3	4
Diploma	18	23	29
Red Deer College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	46	67	51
2nd Year	24	49	57
Graduates:			
Certificate[4]	42	59	-
Diploma	24	41	55
PROVINCIAL TOTAL			
Number of Certificate Training Programs: 4			
Graduates:	78	72	12
Number of Diploma Training Programs: 4			
Graduates:	74	106	139

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[1] Source: **Alberta Health and Social Services Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] The certificate program was offered for the last time in 1982-83.

[3] The certificate program was discontinued in 1982-83.

[4] The certificate program was offered for the last time in 1983-84.

b) Continuing Education Programs:

There was no continuing education programs for rehabilitation practitioners in 1985.

RESPIRATORY TECHNOLOGISTS

I. OVERVIEW

Definition: Administer respiratory therapy to patients in hospital or at home. Discuss patient's treatment with medical and nursing staff. Set up ventilators, incubators, manual resuscitators and other life support equipment. Attach life support equipment to patient. Operate controls of equipment to adjust airway pressure, humidity, blood gas levels, respiratory rate and other factors. Monitor patient's progress and equipment function. Perform basic pulmonary function tests to assist physician in diagnosis of respiratory illnesses. Take blood sample from patient and analyze for blood gas values, if required. Explain treatment procedures and demonstrate equipment operation to patients and hospitals personnel. Perform artificial respiration and external cardiac massage, if required. Service and repair equipment and inspect all medical piping, manifolds and patient alarm system.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Society of Respiratory Technologists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 269 respiratory technologists practicing in Alberta in 1985.[1] About 86 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial respiratory technologists-to-population ratio was 1:8,818 in 1985.

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[1] Source: "March 31, 1985 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Health Disciplines Board
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Alberta Society of Respiratory Therapy
c/o Cardiac Diagnostic Unit
Edmonton General Hospital
11111 Jasper Avenue
Edmonton, Alberta
T5K 0L4

President: Miss Marleen Irwin

c) Legislation:

The designation of the discipline of respiratory technologists under the **Health Disciplines Act** received royal assent in June 1983. A committee was established by the Minister responsible for Professions and Occupations in December 1983 to prepare draft regulations for presentation to the Health Disciplines Board. In October 1985 regulations governing the discipline of respiratory technologist were approved under the **Health Disciplines Act**. The regulations will come into effect in 1986.

III. PERSONNEL DATA

TABLE 1 NUMBER OF RESPIRATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	58,400	1: 19,467
2 (Lethbridge)	11	118,900	1: 10,809
3 (Pincher Creek)	1	38,800	1: 38,800
4 (Hanna)	0	12,900	-
5 (Drumheller)	0	41,300	-
6 (Calgary)[3]	0	71,457	-
7 (Stettler)	0	42,900	-
8 (Red Deer)	12	136,100	1: 11,342
9 (Banff)	1	23,700	1: 23,700
10 (Camrose)	4	82,300	1: 20,575
11 (Edmonton)[4]	0	119,884	-
12 (Fort McMurray)	1	93,900	1: 93,900
13 (Whitecourt)	0	56,900	-
14 (Hinton)	0	27,200	-
15 (Grande Prairie)	5	139,200	1: 27,840
Census Metropolitan Area of Calgary	111	625,143[5]	1: 5,632
Census Metropolitan Area of Edmonton	120	683,016[5]	1: 5,692
PROVINCIAL TOTAL	269	2,372,000	1: 8,818

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[1] Source: "March, 31 1985 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RESPIRATORY TECHNOLOGISTS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	289[1]	298[2]	269[3]
% Change in Number of Practicing Personnel	0.3%	3.0%	-9.7%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios			
- Alberta	1: 8,154	1: 7,928	1: 8,818
- Canada[6]	1:10,251	-	-

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer a two-year respiratory technology diploma program. The two programs together produced 53 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAMS FOR RESPIRATORY TECHNOLOGISTS IN ALBERTA[1]

	1982-83	1983-84	1984-85
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	44	40	45
2nd Year	30	32	30
Graduates:	26	27	29
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	31	28	29
2nd Year	23	29	25
Graduates:	17	26	24
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	43	53	53

[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

b) Continuing Education Programs:

The Northern Alberta Institute of Technology offered a number of additional courses in the respiratory technology field. Some of the courses offered were held in conjunction with an affiliated training hospital for clinical components.

SOCIAL WORKERS

I. OVERVIEW

Definition: Counsels and aids individuals and families to understand and resolve their personal and social problems:

Interviews clients with problems; such as, personal, social and family adjustments, finances, employment, and physical and mental impairments, to determine nature, extent and causes of problems. Secures information, such as social, economic, environmental, medical and psychological factors, contributing to client's situation. Evaluates information obtained and assesses client's capacities. Determines type of assistance required, counsels client regarding plans for meeting needs, and assists client to mobilize his inner capacities and environmental sources to improve social functioning. Aids client, through casework methods, to modify attitudes and patterns of behaviour by increasing understanding of himself, his problems and his part in creating them. Refers client to community agencies and other organizations and arranges for provision of appropriate assistance; such as, financial aid, employment, vocational training, medical treatment, recreational opportunities or housing. Follows progress of client after immediate problems have been overcome, and compiles case records and prepares reports. May secure supplementary information, such as employment, police or medical records, or school reports. May work in collaboration with professionals in other disciplines.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Social Workers (A.A.S.W.) is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1985 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 2,290 social workers practicing in Alberta in 1985.[1] Slightly more than two-thirds of the practicing social workers were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial social worker-to-population ratio was 1:1,036 in 1985.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Licensing, Registration, or Certification Authority:**

Alberta Association of Social Workers
Room 178, Edmonton Inn
11830 Kingsway Avenue
Edmonton, Alberta
T5G 0X5

b) **Professional Association:**

Alberta Association of Social Workers
Room 178, Edmonton Inn
11830 Kingsway Avenue
Edmonton, Alberta
T5G 0X5

President: Ms. Margaret Duhurst

c) **Legislation:**

No legislation exists in Alberta requiring mandatory registration of all social workers practicing in the province. However, under the authority of the **Social Workers Act**, all individuals who wish to use the title of "Registered Social Worker" must register with the Alberta Association of Social Workers (A.A.S.W.). Annual payment of fees is required to maintain registration. Membership in the A.A.S.W. is voluntary.

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

Upon complaint (supported by statutory declaration) against a registered social worker, the Alberta Association of Social Workers is empowered by the **Social Workers Act** to investigate the complaint and, if warranted, to discipline the social worker.

The Universities Coordinating Council evaluates the academic qualifications required for registration with the A.A.S.W. as a registered social worker. The A.A.S.W. sets experiential requirements and determines whether the person is of good character and reputation. Individuals who have a masters degree in social work, or individuals who have sufficient practical experience in social work and who have satisfactorily completed any examination assigned by the Universities Coordinating Council are eligible for registration with the A.A.S.W.

III. PERSONNEL DATA

TABLE 1A NUMBER OF SOCIAL WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1985

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	40	58,400	1: 1,460
2 (Lethbridge)	118	118,900	1: 1,008
3 (Pincher Creek)	25	38,800	1: 1,552
4 (Hanna)	3	12,900	1: 4,300
5 (Drumheller)	13	41,300	1: 3,177
6 (Calgary)[3]	15	71,457	1: 4,764
7 (Stettler)	15	42,900	1: 2,860
8 (Red Deer)	133	136,100	1: 1,023
9 (Banff)	23	23,700	1: 1,030
10 (Camrose)	44	82,300	1: 1,870
11 (Edmonton)[4]	38	119,884	1: 3,155
12 (Fort McMurray)	98	93,900	1: 958
13 (Whitecourt)	20	56,900	1: 2,845
14 (Hinton)	15	27,200	1: 1,813
15 (Grande Prairie)	135	139,200	1: 1,031
Census Metropolitan Area of Calgary	725	625,143[5]	1: 862
Census Metropolitan Area of Edmonton	830	683,016[5]	1: 823
PROVINCIAL TOTAL	2,290	2,372,000	1: 1,036

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 1B NUMBER OF SOCIAL WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1985

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	725	625,143	1: 862
Census Metropolitan Area of Edmonton	830	683,016	1: 823
Between 10,000 and 60,000			
Airdrie	4	10,431	1: 2,608
Camrose	20	12,751	1: 638
Fort McMurray	26	36,810	1: 1,416
Grande Prairie	57	25,056	1: 440
Leduc	10	12,926	1: 1,293
Lethbridge	94	59,901	1: 637
Lloydminster	8	10,557	1: 1,320
Medicine Hat	40	41,717	1: 1,043
Red Deer	80	52,620	1: 658
Spruce Grove	10	11,569	1: 1,157
Wetaskiwin	17	10,022	1: 590
Between 5,000 and 10,000			
Bonnyville	17	5,223	1: 307
Brooks	10	9,421	1: 942
Crownest Pass	18	7,577	1: 421
Drumheller	10	6,671	1: 667
Edson	8	7,110	1: 889
High River	2	5,114	1: 2,557
Hinton	7	8,904	1: 1,272
Innisfail	15	5,435	1: 362
Lacombe	5	5,954	1: 1,191
Peace River	12	6,043	1: 504
Ponoka	16	5,221	1: 326
Rocky Mountain House	8	5,126	1: 641
St. Paul	25	5,052	1: 202
Stettler	5	5,136	1: 1,027
Stony Plain	1	5,291	1: 5,291
Taber	9	6,384	1: 709
Vegreville	9	5,251	1: 583
Whitecourt	0	5,408	-
Under 5,000	192	669,160	1: 3,485
TOTAL	2,290	2,372,000	1: 1,036

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1985.

TABLE 2 SELECTED MANPOWER STATISTICS FOR SOCIAL WORKERS IN ALBERTA, 1983, 1984, AND 1985

	1983	1984	1985
Number of Practicing Personnel	2,202[1]	2,114[2]	2,290[3]
% Change in Number of Practicing Personnel	6.8%	-4.0%	8.3%
Population (Alberta)	2,356,500[4]	2,362,400[5]	2,372,000[5]
% Change in Population	1.5%	0.3%	0.4%
Personnel-to-Population Ratios:			
- Alberta	1: 1,070	1: 1,118	1: 1,036
- Canada[6]	1: 2,950	-	-

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[4] Source: **Alberta Statistical Review** (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: **Canada Health Manpower Inventory, 1984**. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Calgary offers both a four-year Bachelor of Social Work (B.S.W.) program and an 18-month Masters of Social Work (M.S.W.) program. The B.S.W. program produced 149 graduates and the M.S.W. program produced 37 graduates in 1984-85.

Satellite programs of the Faculty of Social Welfare, University of Calgary are located on the University of Alberta campus in Edmonton and on the University of Lethbridge campus in Lethbridge. The Edmonton Division offers a full range of courses at the first professional degree (B.S.W.) level, whereas a partial range of B.S.W. courses are available in Lethbridge. Social work courses are also provided throughout the province and can be taken via tele-conferencing.

There are also diploma programs in social services available at Grant MacEwan Community College, Mount Royal College, and Red Deer College. These programs produced a total of 121 graduates in 1984-85.

TABLE 3 BASIC EDUCATION PROGRAMS FOR SOCIAL WORKERS IN ALBERTA[1]

	1982-83	1983-84	1984-85
A. SOCIAL SERVICE DIPLOMA PROGRAMS			
Grant MacEwan Community College[2] (Program Length: 2 years)			
Enrolments:[2]			
1st Year	106	98	129
2nd Year	58	73	78
Graduates:	37	47	41
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	157	198	137
2nd Year	53	8	67
Graduates:[3]	36	53	58
Red Deer College (Program Length: 2 years)			
Enrolments:			
1st Year	25	25	25
2nd Year	23	22	24
Graduates:	20	20	22

TABLE 3 (cont'd)

	1982-83	1983-84	1984-85
PROVINCIAL TOTAL			
Number of Diploma Training Programs: 3			
Graduates:	93	120	121
B. BACCALAUREATE PROGRAM			
University of Calgary Bachelor of Social Work (Program Length: 4 years)			
Enrolments:[4]			
1st Year	23	21	11
2nd Year	81	59	71
3rd Year	185	235	228
4th Year	142	121	161
Graduates:	137	139	149
C. MASTERS PROGRAM			
University of Calgary Masters of Social Work (Program Length: 18 months)[5]			
Enrolments:			
1st Year	34	54	45
Graduates:	21	32	37

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[1] Source: **Alberta Health and Social Service Training Program Inventory, 1984-85**. Edmonton, Alberta: Department of Advanced Education, December 1985.

[2] As of 1982-83, outreach students have been included in the enrolment data.

[3] The number of graduates may exceed second year enrolments due to the manner in which second year status was calculated and yearly graduate statistics were compiled.

[4] The Faculty of Social Welfare admits students from other faculties into the third year of the B.S.W. program. This accounts for the discrepancy between the enrollment figures for the second year and the third year of the program.

[5] The M.S.W. program is one year in length following a B.S.W. degree. Students with an undergraduate degree other than a B.S.W. degree may be admitted to a two-year program.

b) Continuing Education Programs:

The Faculty of Social Welfare and the Faculty of Continuing Education of the University of Calgary provided continuing professional education in social work in various parts of the province to ensure that new approaches, research, and knowledge were made available to practicing social workers.

Continuing professional education programs were also offered by the Alberta Association of Social Workers in conjunction with its annual conference.